APPENDIX 14

Baker Hughes/Inteq Well Recap Report, Sidewinder #1-H



INTEQ

1675 Broadway, Suite 1500 Denver, Colorado 80202 Tel 303-534-3223 Fax 303-534-0878

January 10, 2000

Mr. Dan Lockwood Union Pacific Resources 777 Main MS 33-3605-1 Fort Worth, Texas 76101

Re:

Sidewinder Unit #1-H

Section 2, 19 North – 97 West Sweetwater County, Wyoming

TD = 16,876' (15,554' TVD) Frontier Test

Dear Mr. Lockwood:

Baker Hughes *INTEQ* – Drilling Fluids wants you to know that we are pleased to have been able to provide you with the finest mud materials and the most accomplished engineering service on the Sidewinder Unit #1-H.

The enclosed mud recap data was compiled by Brad Satterlee and Craig Adels, using our COMPUDRIL 2000 software package. The single page "Well Recap" was based on the reports generated by this engineering team.

We want to thank you for the opportunity to be part of this Union Pacific Resources project, and gratefully appreciate the role that you have played and the support you have given our company.

As always, please call on us whenever we can be of assistance. We welcome the chance to be of service to you and Union Pacific Resources.

Sincerely;

Baker Hughes INTEQ - Drilling Fluids

James W. Kleinsorge

Northwestern US Operations Manager

rf/B990603-12190

Native with Sweeps: 1297' to 8300'



Recommendations:

- Make more efficient use of sweeps.
 - Increase sweep volume.
 - Run sweeps more often.
- Lightly Mud-up after drilling cement.

Actions:

- Recommended sweeping hole once per tour with 200 bbls of 100+ viscosity. This action aided hole cleaning and allowed the water drilling to be extended which in turn aided ROP.
- Mud-up point was dictated by hole conditions. No light mud-up after drilling cement was warranted.

MILGEL/Chemical: 8300' to 12,000'



Recommendations:

- Improve hole cleaning; maintain LSR @ 3-4 #/100 ft².
- Maintain 0.25 ppb NEW-DRILL to improve wellbore stability.
- Control seepage with LCM sweeps.
- Reduce bit balling and increase ROP.

Actions:

- Hole cleaning was not an issue. Yield point and LSR was sufficient to maintain good carrying capacity.
- Hole stability was good so NEW-DRILL was not necessary.
- Seepage losses were minor.
- Bit balling was not a problem.

Weighted Gel/Chem: 12,000' to 15,541'



Recommendations:

- Increase mud weight to control formation "collapse".
- Improve chemical stability with "inhibitors" and lower API and HTHP values.
- Cuttings bed "slump" control with contrasting low-vis/hi-vis sweeps.
- Increase YP:PV ratio to improve hole cleaning and suspension.
- Use MIL-LUBE to reduce friction.
- Increase frequency of pipe rotation and reciprocation to disturb "cuttings bed" and enhance transport.

Weighted Gel/Chem: 12,000' to 15,541'



Actions:

- Formation collapse was not experienced. Mud weight was increased to control BGG.
- The addition of 5% diesel may have enhanced stability. API & HTHP values were reduced to drill the "curve".
- Hole conditions did not dictate the need for contrasting sweeps.
- YP:PV ratio actually decreased. The flow profile was transitional to turbulent instead of laminar to transitional.
- As small amount of MIL-LUBE along with diesel and "beads" was used to slick-up the hole.

Weighted Gel/Chem: 15,541' to 16,876'



Recommendations:

- Maintain constant mud weight to reduce mechanical failure.
- Support vertical stress with sufficient mud weight to prevent roof collapse.
- Improve hole cleaning to prevent tight hole and pack-off.
- Use MIL-LUBE to reduce torque and drag.
- Increase LSR to 4-6 #/100 ft².

Actions:

- Mud weight was varied to:
 - Control BGG
 - Prevent lost circulation
 - Control mechanical failure

Weighted Gel/Chem: 15,541' to 16,876'



- Raising the mud weight to a level that may have afforded control would have resulted in increased lost circulation. Maximum mud weight to avoid losses was 15.2 ppg.
- Since mechanical failure did occur, some pack-off was reported.
 Contrasting sweeps proved to be of limited value due to the low "event" time of the sweep volume.
- Torque and drag were not problems as result of the diesel that was added.
- Fewer hole problems were experienced when the LSR was maintained at 4 to 5 #/100 ft² or higher.

Other Positive Actions



- The use of a "native" fluid was extended beyond that which was recommended with no adverse effects. Mud-up occurred due to deteriorating hole conditions
- Shale stabilization was not a problem and the "gel-based" mud performed very well.
 - PHPA polymer was not used and was not missed.
 - Other inhibitors were thought to be necessary, but hole conditions proved otherwise.
- Polymeric viscosifiers were used lightly employed. Usage increased in the horizontal hole during the hole failure at 16,308'.
 - The low usage reduced the need for biocides. Biocide cost was cut by 57%.

Other Positive Actions



- Hole conditions in the vertical and "curve" did not suffer due to limit use of polymeric viscosifers.
- While drilling Sidetrack #2, the use of XANPLEX D elevated the LSR and hole cleaning problems were not reported.
- Control of the HTHP fluid loss value and filter cake quality improved overall hole conditions.
 - Control was accomplished with LIGCO and MIL-PAC.
- Differential Pressure Sticking did occur. The quick spotting of an unweighted BLACK MAGIC SFT soak allowed the pipe to come free in 2 hrs.
 - BLACK MAGIC SFT was on location for use if needed. The quicker a soak can be spotted the more likely the pipe will come free.

Other Positive Actions



- Lowering the sand content to 1/8th or less seemed to improve tool life.
 - Use solids equipment to maintain a very sand content from KOP to TD.
- Continuity of the engineering team from spud to release.
 - Improved communications.
 - Better team work.
- Use of COMPUDRIL 2000 software advanced data collection and presentation.
 - Will be used from start to finish on the Sage Flat Unit #7-H.
 - Will also employ other engineering and informational software.

Table of Contents



Union Pacific Resources Sidewinder Unit #1-H Section 2, 19 North - 97 West Sweetwater County, Wyoming

epth	Geometry	Actual	Drilling Fluid Highlights	Mud Weight	Vis.	Fluid Loss	PV	YP	LSR	Depth MD	Highlights - Orginal Hole	Highlights - Sidetrack #1	Highlights - Sidetrack #2
1000	Hole Size: 17.5° Casing: 13.375° @ 1297' Interval Time: 4 Days	Wasaroh	Native with Sweeps: Spud in with water and used MILGEL/Lime sweeps. 980 gpm and the sweeps were effective.	8.48.5 8.78.9 8.48.5	50-60	N/C	2-3	0	0	15,000 15,100 15,200	Add 5% diesel.		
			Native with Sweeps: Used MILGEL, and Lime to sweep the hole as needed.	8,44.5	27729	100				15,300			
2000*	Hole Size: 12.25* Casing: 9.625* @ 12,000*	Fort Unic	n 750 gpm and the sweeps were effective.							15,400° 15,500°	Increasing BHT.		
3007	Interval Time: 30 Days		Tight hole.							15,600	7.625* casing @ 15,541*	Tried to out trough at 15,660°. Move up to 15,600° and out trough.	Begin sidetrack #2 at 15,560°. Inc MW to 15.5 ppg. Add XANPLEX D and inc 3 rpm=7.
1000			Tight hole.	8.8-9.0	36-40	10-15	8-10	10-12	2-4	15,700	Increase MW to 14.5 ppg. Cut out additions of XANPLEX D.	to 15,600 and out dougs.	o species.
		Lance	Tight hole.							15,800'	Back ream on connections. TIH & ream from 15,711 to 15,847	Resm 2.5 hrs TB. 3 rpus=1.	 Lower sand content to less than 1/8. A LIOCO to improve cake quality.
5000			Tight hole.							16,000	Lost 200 bbls. Lower MW to 14.1 ppg. Hole drug. 3 rpm=2.	Core 15,959 to 15,996'	 Lost 300 bbls to fractures (?). Sticky while sliding. Lower MW to 15.2 ppg. At 16,060', shut down to orient tools.
60007		Fox Hills Lewis								16,100°	Drill out of the top of section. Begin sidetreck #1.	T3H, W/Ran 16,050 to 16,143°	Differentially stuck. Spot BM-SFT. For in 2 hrs. Lower MW to 14.5 ppg. Lowe API FL to 8.0 or less and improve HTHI
		Almond	6,250							16,300'	TD = 16,107*	Expensive W/Rm. Inc M/W from 13.8 to 15.0 ppg. Hole very *sticky*. Lost 460 bbls. Tight at 16,308 to 16,240'. Add	FL and cake. 3 rpm~4.
0007		Almond	Tight hole.							16,400'		diesel/httlLUBE/beads. Stuck at 16,306°. Pump sweeps. Pressure up. Inc MW to 15.1 ppg. Fish. Recover HWDP: TIH	 TIH after logs and begin W/Rm TB. Seepage losses with 14.5 ppg. Pump sweeps. Short trip. C&C to this mud 5
10007		Ericson	7,500	9.5-10:0	38-42	10-12	12-14	10-12	2-4	16,600*		and push motor & bit TB. P/U tools to sidetrack: TIH to 16,035'	running and cementing 3.5° liner.
9000'		Ericaon Blair	MILGEL/Chemical Began mud-up after 2 trips with excessive tight hole.							16,700° 16,800°		and "stock", MW = 15.0 ppg 3 rpm=1. Back-off to 15,241'. Spot BM-SFT. Recover 364' of fab. TOF = 15,605'.	
		Blair	One kick. Increase MW to 9.7 ppg.							16,900		Condition HTHP of mud prior to starting sidetrack #2.	Logged with reported problems. TD = 16,876°
,000			9,650' Lost 75 bbis on trip.	10.0-10.5	38-42	8-10	14-18	10-12	2-4	17,000		TD = 16,308	
1,000*			Lost 91 bbls.										Total Depth: 16,876 MD - 15,554 TV Total Drilling Time: 156 Days
2,000		4		10.0-10.5	38-42	8-10	14-18	10-12	2-4				
,000	Hole Size: 8.5/9.875* Casing: 7.625* @ 15,541* MD	Bacter	Weighted MILGEL Chemical: Increase MW to 11.5 ppg. 12,259	11.0-12.0	40-42	8-10	18-20	10-12	2-4				
	Interval: 44 days												
ľ000				12.0-13.5	42-45	8-10	20-22	12-14	3-5				
,000			Increase MW to 14.0 ppg.	14.0-14.5 14.0-16.0			25-30 28-34	12-14 15-17					
,000		Frontier	Lost 300 bbis. Increase MW to 14.9 ppg. 15,500' Increase MW to 15.5 ppg.	14.0-16.0	42-50	8.0	28-34	15-17	5-8				
	Hole Size: 6.5* Casing: 3.5* @ 16,876 MD Interval Time: 78 Days		PB to 14,900'. Reduce MW to 14.4 ppg. Drill from KOP to 15,541'. Added 5% direct. Spot 25 ppb beads through curve and ran 7,625' liner, 68'.										



Interval Summary

Operator Well Name and No. Contractor Rig Name/Number

UNOIN PACIFIC RESOURCES SIDEWINDER 1-H SST

Field or Block No. Lease Offshore Area Legal description State

SIDEWINDER **SWEETWATER** 2-19N-97W WYOMING

USA Country

INTERVAL START DATE

INTERVAL END DATE

TOTAL DAYS / DRILLING DAYS

88

MUD TYPE

START DEPTH

MAXIMUM DEVIATION

END DEPTH

TOTAL VERTICAL DEPTH

MAXIMUM MUD WEIGHT

HOLE SIZES

TOTAL FOOTAGE DRILLED

FOOTAGE DRILLED PER DAY / DRILLING DAY

COST PER DAY / DRILLING DAY

COST PER ft

PLANNED INTERVAL COST

TOTAL INTERVAL COSTS

MUD ENGINEERS

8/4/99

1/6/00

156 / 105

WTD LSND - NATIVE

1300 ft

deg

16876 ft

ft

15.70 ppg

17.5 - 12.25 - 9.875 - 8.5 - 6.5 in

15576.00 ft

99.85 / 148.34 ft

2,963.36 / 4,402.70 USA

29.68 USA

300,000.00 USA

462,283.66 USA

 $\ensuremath{\mathsf{MR}}.$ BOB EARL , $\ensuremath{\mathsf{MR}}.$ BRAD SATTERLEE , $\ensuremath{\mathsf{MR}}.$ CRAIG ADELS , $\ensuremath{\mathsf{MR}}.$ JERRY HESS

2



Total Material Consumption

Operator
Well Name and No
Contractor
Rig Name/Number

UNOIN PACIFIC RESOURCES SIDEWINDER 1-H SST 88 Field or Block No Lease Offshore Area Legal description State SIDEWINDER SWEETWATER 2-19N-97W WYOMING Country USA

ITEM	QUANTITY	UNIT SIZE	UNIT COST	COST
BLACK MAGIC SFT	150	25 kg bag	69 15	10,372 50
CAUSTIC SODA	117	50 lb bag	16 47	1,926 99
CHEK-LOSS	41	25 lb bag	23 58	966 78
CITRIC ACID	25	50 LB bag	117 98	2,949 50
CY-FLOC	2	50 lb bag	43 81	87 62
DRILL-THIN	103	25 lb sack	63 00	6,489 00
ENGINEERING	154	0 DAY	250 00	38,500 00
Gypsum	60	100 lb bag	7 20	432 00
HYPO-CLORITE	1	55 gal DRUM	505 00	505 00
LD-8	3	5 gal pail	115 20	345 60
LIGCO	115	50 lb bag	9 36	1,076 40
LUBRI BEADS C	96	50 LB BAG	135 70	13,027 20
LUBRI BEADS F	27	50 lb bag	135 70	3,663 90
MIL-BAR	2666 3	1 ton bulk	67 80	180,775 14
MIL-BAR SX	1680	100 lb bag	4 10	6,888 00
MIL-CARB	462	50 lb bag	5 08	2,346 96
MIL-CEDAR FIBER	14	40 lb bag	6 60	92 40
Mil-Lime	118	50 lb bag	4 35	513 30
MIL-LUBE	10	55 gal drum	696 00	6,960 00
MIL-PAC	133	50 lb bag	135 93	18,078 69
MIL-PAC LV	17	50 lb bag	163 50	2,779 50
MILGEL	2095	100 lb bag	2 84	5,949 80
MILMICA COARSE	113	50 LB SACK	10 45	1,180 85
MILMICA FINE	450	50 lb bag	10 45	4,702 50
MISCELLANEOUS	1	1	505 00	505 00
NEW-DRILL	28	5 gal pail	47 58	1,332 24
NEW-DRILL PLUS	3	25 lb bag	90 67	272 01
NEW-VIS	42	50 lb bag	253 87	10,662 54
PAPER	10	40 lb bag	7 70	77 00
RENTAL CHARGES	156	1	134 71	21,015 00
			Total Cost	3/1/ /73 /2 IISA

Total Cost 344,473 42 USA

ITEM	QUANTITY	UNIT SIZE	UNIT COST	COST
SAPP	10	50 lb bag	45 42	454 20
Sawdust	170	40 lb bag	5 00	850 00
SHRINK WRAP	134	1 ea	17 00	2,278 00
Sodium Bicarbonate	198	100 lb bag	13 80	2,732 40
TAX	152	1	141 63	21,528 09
TEQ-THIN CF	40	50 lb bag	64 68	2,587 20
TRANSPORTATION	58	1	959 65	55,659 76
X-CIDE 102	93	5 gal pail	161 43	15,012 99
XAN-PLEX D	85	25 lb bag	196 56	16,707 60

Total Cost 462,283 66 USA

Volume Accounting

9



Detailed Volume Accounting by Interval

Operator Well Name and No

Contractor Rig Name/Number

UNOIN PACIFIC RESOURCES

SIDEWINDER 1-H

SST 88 Field or Block No Lease Offshore Area

Legal description State SIDEWINDER

SWEETWATER 2-19N-97W WYOMING Country USA

Interval Start Date 8/4/99

Interval beginning depth 1300 ft

Interval End Date 1/6/00

Interval ending depth 16876 ft

All volumes in bbl

Mud Made Mud Lost

Water added:	14033	Mud dumped:	5723
Brine added:		Mud lost on surface:	3792
Oil added:	187	Mud lost down hole:	3155
Whole mud added:	400	Mud lost to solids control:	
Chemicals added:		Other losses:	86
Barite added:	10	Left in hole:	410
Mud received:		Mud returned:	
Other gains:	376	Behind casing:	
Total volume additions:	15006	Total volume lost:	13166

Volume made per ft of hole: 0 96
Volume lost per ft of hole: 0 85
Volume lost per day: 84 40
Volume made per day: 96 19

Hole size: 17 5 - 12 25 - 9 875 - 8 5 - 6 5 in

-

Mud Properties

Δ



Mud Properties - Water based

State

INTEQ

Operator Well Name and No. Contractor

Rig Name/Number

UNOIN PACIFIC RESOURCES SIDEWINDER 1-H SST

88

Field or Block No. Lease Offshore Area Legal description SIDEWINDER SWEETWATER 2-19N-97W WYOMING Country " USA

Report Date	Depth MD	FL Temp.	Test	Mud Wt.	Funr	nel P	V n	YP lbs/100ft2	Gels 10 sec	Gels 10 min	Gels 30 min	API Filt.	HTHP cc	HTHF F		Cake		Water Pct.	Glycol Pct.			MBT	рН	Alk Pm	Alk Pf	Alk Mf	Chloride Mg/l	Total Hdns		LGS ppb	HGS ppb
Date	ft	F.	F	ppg	sec/		٦,	100112		lbs/100ft2					^''		Pct.	• • • •	,		1 01.	ppu		ml	mi	ml	l ling/i	mg/l		ppp	pps
8/4/99	0			8.3	26	· c)	1			W. Carlonna L.						-0.01	100				0.00	8	1	0.05	0.4	100	10		**	
8/5/99	740	110		8.6	32	3	3	1		1		N/C		l	1		1.99	98			1/8	10.00	8.8	0.35	0.15	0.4	100	10	2.52	19.01	-1.39
8/6/99	1297			8.8	30	1	\sqcap					N/C		†	1	1	3.49	96.5		Ì	NIL	10.00	9	0.55	0.2	0.5	100	10	2.56	32.68	-1.42
8/7/99	1297			8.4	26	C	7	1							 	1	-0.01	100		 -		0.00	8.8	1	0.1	0.4	100	10			
8/8/99	2412			8.8	28	1	7			1		N/C				1	3.89	96.1		<u> </u>	NIL	0.00	9	0.45	0.2	0.4	100	10	2.40	39.96	-7.30
8/9/99	3354			8.4	26	C	\uparrow	1							+-		-0.01	100				0.00	8.8		0.1	0.35	100	30			
8/10/99	4963			8.4	26	()	1							+-	1	-0.01	100	<u> </u>			0.00	10.2		0.25	0.4	100	30			
8/11/99	6244			8.45	27	- 0)	1									0.99	99				0.00	10.3		0.3	0.6	100	10	2.25	11.03	-3.20
8/12/99	7003			8.4	26	- 0		1									-0.01	100		ļ		0.00	9.9		0.2	0.4	100	 			
8/13/99	7558			8.4	26	- 0	7	1							T^{-}		-0.01	100		· · · ·		0.00	9.6		0.15	0.35	100	30			
8/14/99	7720			8.4	26		7	1				·			T^{-}		-0.01	100		T .		0.00	9.2		0.1	0.3	100	 			
8/15/99	8158			8.4	26		5	1							T^{-}	1	-0.01	100				0.00	9.54		0.15	0.4	100	30			
8/16/99	8397			8.45	30	3	3	2	1	2		21			1		0.99	99				8.00	8.8	0.15	0.1	0.25	100	10	2.25	11.03	-3.20
8/17/99	8678			8.6	31	13	3	3	2	4		19			2		1.99	98	1	1		12.00	9.3	0.3	0.2	0.3	100	10	2.52	19.01	-1.39
8/18/99	8975			8.8	38	5	7	10	2	6	14	14.5			2	 	3.49	96.5		-	NIL	16.00	9.5	0.25	0.1	0.25	100	10	2.56	32.68	-1.42
8/20/99	9351	95		9.7	40	1	5	15	3	6	12	13.8			2	 	7 49	92.5			1/2	0.00	8.7	0.25	0.05	0.4	100			44.14	38.86
8/21/99	9549	130		9.8	46	1.	8	19	4	12	19	13.8			2	1	8.49	91.5	<u> </u>		1/2	20.00	8.62	0.25	0.05	0.45	100	30	3.05	55.53	35.17
8/22/99	9709	130		10.1	43	1	6	16	3	15		13.2			2	1	9.49	90.5	<u> </u>	· · · · ·	1/2	26.50	8.8	0.2	0.15	0.45	100	30	3.21	53.28	53.50
8/23/99	9853	128	 	10.1	47	1	7	16	3	17	27	13.6		 	2	1	9.99	90	1	1	1/2	28.00	8.65	0.2	0.05	0.55	100	30	3.10	62.38	46.15
8/24/99	9963	110		10.2	56	2	2	26	4			13.4			3		10.49	89.5	—	_	1/2	29.00	8.56	0.2	0.05	0.6	100	30	3.12	64.67	49.81
8/25/99	10245	148		10.1	45		_	17	3	12		14.2			3		10.99	89	-		3/4	30,00	8.94	0.25	0.075	0.6	100	20	2.91	80.58	31.45
8/26/99	10382	129		10.3	60	2	3	27	5	33	45	13.6			5	1	11.98	88	1		3/4	32.00	8.95	0.35	0.05	0.65	400	20	2.95	85.03	38.73
8/26/99	10602	146		10.3	44	1	6	15	3	21	38	13		 	2	· · · · · · · · · · · · · · · · · · ·	12.48	87.5			1/2	32.00	9.2	0.45	0.1	0.7	300	20	2.87	94.17	31.40
8/27/99	10865	150		10.6	49	2	2	25	4	25		12.4		1	3	1	13.98	86		 	1/2	33.00	9.23	0.5	0.1	0.7	300	20		101.03	42.37
8/29/99	11119	151		10.55	48			22	3	31	54	13.6		1	3		13.98	86			1/4	32.00				0.75	300	20		104.44	
8/30/99	11183		 	10.75	60			33	5	40	71	12.4	l	 	3	1	15.48	84.5		<u> </u>		36.00				0.85	300	20		118.11	
8/31/99	11440	150		10.5	55			29	7	40	70	11.8			3		14.18	85.8		 	1/4			0.4	1	0.8	300	20		111.48	1
10/13/99		148	\vdash	10.6	49			21	6	35	55	10.4		+	2		13.78	86.2		1	1/4	35.00			0.15		300	40		97.39	45.31
9/2/99	11973	150		10.6	44	. 1	8	24	5	32	60	10.2			2	†	14.08	85.9		\vdash	TR	36.00	9.2	0.4	0.15	0.8	300	60	2.92	102.85	40.90
9/3/99	12000			10.6	41	1	2	18	5	20	40	10.4			1 2		13.78	86.2	1	 	TR	34.00	9.1	0.4	0.1	0.8	300	60		97.39	45.31
9/4/99	12000			10.7	44			21	6	21	51	11.2			2		14.38	85.6	1	1	TR	36.00				0.9	300	40	2.96	101.49	47.50
10/14/99	12000		\vdash	10.6	41		_	16	4	10	18	11.8			2	+	13.28	86.7	1		TR	32.00	8.6	0.3	0.05	0.5	300	20		88.29	52.66
9/6/99	12000			10.6	42		5	17	4	10	20	11.8			2		13.28			 	TR	32.00					300			88.29	52.66
9/7/99	12000			10.5	44		_ 1	12	2	12	32	10.6			2	1	12,48			†	TR		1	0.35	I	0.75	300	20	J	80.54	53.41
9/8/99	12020			10.55			6	7	1	8	27	11.4	 	+	2			87.5			TR	31.00			0.5	1.3	300			77 13	58.92
9/9/99	12330	121	 	11.5			1	10	2	4	11	10.4	-	 	2	+	13.98	86	- 	1	TR	21.00				0.8	300			39.69	141.45
9/10/99	12770	126	 	11.5			3	14	3	5	10	9.7		1	2	+	13.98	86	+	1	TR	21.00				0.85	300			39.69	141.45
I	13545	131	-	11.8			5	15	2	8	21	10.4		1	2	+	15.98	84	+	1	TR	23.00			0.15		300			55.65	145.08
9/12/99	14078	133	 	11.75				25	3	18	41	10.8		+	2	+	15.98	84	+	1	TR	27.00			0.10	0.8	300			59.06	139.58
9/13/99	14333	124		11.75			L	33	3	<u> </u>		10.4	 	1	2	+	16.99	83	+	+	TR	27.00			0.1	0.85	300			77,26	124.88
9/14/99	14649	140	-	11.8				24	3	35	64	10.3	-		2	 	17 49		+	1	TR	30.00			0.4	1.2	300			82.95	123.03
9/15/99	15013	139	+-	14	49		6	24	4	21	48	9.6		+	- 2	+	25.99	74	+	1	TR	20.00			0.25		300				240.28
<u></u>	1,00,0	100		1 ' '	1 10		-		<u> </u>		1 -10	10.0	L				1_0.00	<u> </u>		<u> </u>	1		13.30	0.,	0.20	1 0.0	1 000		3.51	31.10	12.70.20

Report	Depth	FL	Test	Mud	Funnel		YP	Gels	Gels	Gels		HTHP	HTHP					rGlycol				рΗ	Alk	Alk	Alk	Chloride		ASG		HGS
Date	MD ft	Temp.	Temp.	Wt.	Visc. sec/qt		lbs/100ft2		10 min lbs/100ft2	30 min	Filt.	cc	F	API	HTHP	crtd Pct.	Pct.	Pct.	Pct.	Pct.	ppb		Pm ml	Pf ml	Mf ml	Mg/I	Hdns mg/l		ppb	ppb
9/16/99	15320	F 140	<u> </u>	ppg 14.15	42	29	18	4	18	38	9.7			2		24.49	75.5	 		TR	19.00	9.1		0.15		300		3 84	50.21	278.85
9/17/99	15344	126	ļ	14.1	58	38	39	6	31	73	10.8			2		24.99	75	.		TR	19.00			0.15		300	1 _			265.99
	15406	139		14.1	42	27	20	3	16	36	9.6			2		23.99	76			TR	18.00	9.05	0.8	0.15		300				280.69
	15465	132	 	14.3	44	27	21	3	12	28	9.4			2		23.99	76	1		TR	18.00	9.03		0.15		300	_		30.88	
9/20/99		122		14.5	47	33	29	3	26		9.7			2		24.99	75			TR	18.00	9.2	0.8	0.15	0.8	300	20	3.95	35.46	310.03
10/26/99				14.5	45	27	21	3	14	29	9.5			2		24.99	75			TR	18.00	9.5	0.8	0.15	0.7	300	40	3.95	35.46	310.03
9/22/99	15559		i —	14.5	46	26	29	5	14	29	9.6			2		23.99	76			TR	18.50	9.65	0.8	0.2	0.8	300	40	4.07	17.25	324.73
9/23/99	15549	132		14.5	38	20	15	3	20	42	9.8			2		24.49	75.5			TR	16.50	9.9	0.6	0.3	0.8	300	40	4.01	26.35	317.38
9/24/99																	ĺ													
9/25/99	15723	140		14.9	41	26	27	5	27	52	9.6			2		25.99	74			1/4	16.50	10.4	0.7	0.5	1.2	300	60	4.02	26.40	339.36
9/26/99	15750			15.5	44	27	32	8	32	55	9.8			2		28.49	71.5			1/4	16.50	9.8	0.6	0.3	8.0	300			31.01	
9/27/99	15750			15.3	48	32	38	12	14	66	11.4			2		28.09	71.9			1/4	16.00	10.6	1.8	0.5	1	300	1	1 1	37.36	1 1
9/28/99	15750			15	47	27	36	5	24	59	11.8			2		27.99	72			1/4	16.00	9.54	0.8	0.2	1.2	300	30		55.98	
9/29/99	14900	110		14.7	83	35	40	50	120		14.4			2		26.99	73		<u> </u>	1/2	16.00	11.46	1.8	1.2	1.8	300	_		58.23	
9/30/99	14900			14.2	42	22	12	9	65		13.8			2		26.49	73.5		ļ.,	1/2	15.00		1.5	0.6	1.3	300			83.20	
	14949	130		14.45	41	19	12	4	18	45	10.6			2		24.99	71		4	1/2	14.00	1	1.3	0.4	1.2	300	20		l .	311.14
	14976	115		14.4	54	29	20	6	48		10.8			2		24.99	71	4	4		,	9.78	1	0.5	1.3	300		I	l .	305.64
10/3/99		130		14	40	23	9	3	13	25	8.6			2	ļ	22.99	73.5		3.5	1	13.00		_	0.45		300	_			290.17
10/4/99		125		13.9	41	21	8	2	11	24	9.6			2	ļ	22.99	72		5	1/8	13.00	9.45	1	0.45	1.1	300 300	20		34.83 41.45	
10/5/99		130	ļ	14.1	41	22	9	2	9	24 18	10.2 9.2			2		23.99	73		3	1/8	13.00	9.42	0.9	0.35	1	300	20	, ,	41.45	
10/6/99	15129	120	<u> </u>	14.1 14.35	40	21 26	8	3	11	38	9.2			2		25.49	73	 -	1.5	1/4	20.00	9.35		0.35	0.8	300	20	1 3	53.25	
10/7/99	15216 15322	128 128		14.33	45	24	12	3	11	30	8.4			2	-	24.99	72		3	1/4	20.00	9.4		0.25		300		1	1	281.96
10/9/99	15364	122	<u> </u>	14.4	41	28	14	4	12	34	8.8			2		24.99	72	+	3	1/4	20.00			0.25		300	20		J	303.98
10/10/99		126	-	14.45	43	28	14	4	6	28	8.4			2		24.99	72	-	3	1/4	17.50	I .		0.25		300	1 _		I	309.49
10/11/99		128		14.55	47	30	15	4	20	36	8.0			2		25.99	70	1-	4	1/4	12.50	I .			0.6	300	20		46.16	
10/12/99		140	+	14.5	45	32	17	5	19	28	6.6	 		2		23.99	72		4	1/4	10.00	9.25	0.5		0.6	300	20		13.16	
10/13/99		126		14.5	46	30	10	3	14	24	7.0			2	l	23.99	72	1	4	3/4	10.00	9.2	0.5	0.15	0.55	300	20	4.10	13.16	331.34
10/14/99			 	14.5	46	30	9	3	14	29	7.0	 	ļ	2		23.99	72		4	3/4	10.00	9.2	0.5	0.15	0.55	300	20	4.10	13.16	331.34
10/15/99	15541	125		14.5	48	29	13	3	16	25	7.3		1	2		23.99	72		4	1/2	10.00	9.34	0.5	0.15	0.55	300	20	4.10	13.16	331.34
10/16/99	15089	118		14.3	45	25	12	3	19	36	8.2			2		23.49	71.5		5	1/2	10.00	9.49	0.55	0.15	0.6	300	20	4.08	16.67	318.33
10/17/99	15541	135		14.45	42	27	11	2	11	22	8.6			2		23.99	71		5	1/2	10.00	9.41	0.5	0.15	0.6	300	20	4.09	15.55	327 49
10/18/99	15541	120		14.5	42	26	11	2	10	21	8.7			2		24.49	71		4.5	1/2	10.00		0.5	0.1	0.5	300	20	1	21.75	
10/19/99	15541	115		14.5	43	27	13	2	12	24	8.6			2		24.99	70.5		4.5	1/2	10.00	9.15	0.45		0.5	300	20	1	30.86	
10/20/99	L	110		14.3	42	21	12	7	41	80	16.2			2		23.99	71.5		4.5	1/4	9.50	11.93		3.8	4.5	300	0		26.28	
10/31/99				14.3	42	50	10	7	40	80	16.2		<u> </u>	3		23.99	71.5		4.5	1/4	9.50	11.8	4	3.8	4.5	300	0		26.28	
10/22/99	15541	118		13.6	45	20	18	10	30	89	12			2	<u> </u>	19.99	76		4	1/4	10.00	11.5	2	1.05	3.3	300	20	4.19		291.06
10/23/99	15580	122		14.1	46	30	19	6	19	36	9.2			2		20.99	76		3	1/4	8.75	10.9	1.5	1.25	2.8	300	20		-13.16	
10/24/99	15618	118		14.1	42	24	12	5	17	26	10.4			2		22.99	75		2	1/4	7.50	11.36		1.3	2.8	300	20		24.27	
10/25/99	1	106		14	41	23	10	4	12	20	10.0		ļ	2		22.99	75	<u> </u>	2	1/4	8.25	10.81	2.3	1.1	2.1	300	20			287.69
10/26/99	1	106		14.3	47	30	15	5	14	21	9.8			2		23.99	74		2	1/4	7.50	10.85		1.1	2.8	300	20		28.84	
11/27/99	15847		↓	14.55	47	30	14	4	14	21	8.0	<u> </u>	ļ	2	_	21.99	73	1	5	1/4	7.50	10.45	1	0.8	2.4	300	30			
10/28/99	I	400	ļ	14.1	45	31	16	4	10	19	8.7	-	ļ	2	-	22.49	73.5 73	-	4	1/4	8.50	10.2	1.2	0.55	1.8	300	20		13.12	
10/29/99	15965	108	1	14.1	46	35	1	2	9	17	9.0	1	1	2	 	22.49	72		4.5	1/4	8.00	10.2	1.2	0.5	1.6	300	20		21.20	
10/30/99		103		14.1	53	44	20 15	3	1 9	19	9.1		-	2	-	22.99	72		5	1/4	9.00	10.1	1.1	0.4	1.2	300	20		21.20	
10/31/99	15675 15660	102	+-	14.1	46	34	15	3	10	17	9.1		-	2	-	23.49	72		4.5	1/4	9.00	9.94	1.1	0.35	1.1	300	20		30.81	
11/2/99	15660	103	+-	14.1	49	38		3	8	17	9.3		-	2		22.99	73	+	4.5	1/4	9.00	9.87	1	0.35		300	20		1	302.01
1112199	13000	100		14.1	1 49	50	1 17				0.4	Ь	J	<u></u>		22.00	1.0	}		177	0.00	0.07	'	10.00	1	000	120	17.00	1-2.22	1302.01

Date		_FL	_Test		Funne	alle A	YP	Gels	Gels	Gels				Cake	Cake	Solids	Water					pН	Alk	Alk	Alk	Chloride		SG	LGS	HGS
	MD	Temp. F	Temp. F	Wt.	Visc. sec/q	t cp	lbs/100ft2	10 sec lbs/100ft2	10 min lbs/100ft2	30 min lbs/100ft2	Filt.	cc	F	API	HTHP	crtd Pct.	Pct.	Pct.	Pct.	Pct.	ppb		Pm ml	Pf ml	Mf ml	Mg/I	Hdns mg/l		ppb	ppb
11/3/99 1	15600	100		14.1	44	31	15	2	6	13	8,9			2		22.99	72		5	1/4	9.00	9.81	0.9	0.3	1.1	300		.04	21.20	303.66
11/4/99 1	15626	100		13.95	44	31	14	2	6	13	9.0			2		22.99	72		5	1/4	9.00	9.8	0.8	0.25	1.1	300	20 3	.96	31.42	287 15
11/5/99 1	15626	100		14	44	33	10	2	4	14	9.0			2		24.99	70		5	1/4	8.25	9.99	0.8	0.25	1.1	300			64.42	263.25
11/6/99 1	15622	100		14	45	32	12	3	5	16	9.0			2		24.99	70		5	1/4	8.25		0.8	0.25	1	300			64.42	263.25
11/7/99 1	15666	105		14	45	32	14	2	9	14	9.0			2		26.99	69		4	1/4	7.50	9.5	0.8	0.3	1.1	300	20 3	.54	101.84	232.20
11/8/99 1	15870	105		14.1	45	35	14	3	9	16	9.0			2		26.99	69		4	1/4	7.50	9.5	0.8	0.25	1	300	20 3	.58	95.03	243.21
11/9/99 1	15959	105		14	44	34	9	2	7	17	9.0			2		27.99	69		3	1/4	7.50	9.3	0.7	0.3	1	300	20 3	.44	121.07	215.85
11/10/99 1	16003	105		14	47	33	13	2	4		9.0			2		25.99	72		2	1/4	7.50	9.8	0.8	0.5	1	300			85.69	243.59
11/11/99 1	16019			14.1	46	28	14	2	6	10	9.1			2		22.99	74		3	1/4	7.50	9.59	0.8	0.2	0.9	300	20 4	.02	23.25	300.35
11/11/99 1	16133	106		13.7	43	28	11	2	5	9	9.2		-	2		21.99	75		3	1/8	8.00	9.31	0.6	0.125	0.8	300	20 3	.94	32.31	271.02
11/12/99 1	16168	105		13.6	42	25	11	2	7	11	8.9			2		21.49	75.5		3	1/8	8.00	9.78	0.65	0.2	0.9	300	20 3	.95	30.02	267.36
11/13/99 1	16231			13.4	42	24	9	3	5	9	8.6			2		21.99	75		3	1/8	10.50	9.35	0.6	0.125	0.8	300	20 3	.78	52.75	237.99
11/14/99 1	16231			13.6	42	23	8	2	5	9	8.5			2		22.49	74.5	1	3	1/8	10.50	9.26	0.6	0.125	0.8	300	20 3	3.82	48.22	252.66
11/16/99 1	16231			13.5	42	22	10	3	5	8	9.3			2		21.49	77		1.5	1/8	12.50	8.7	0.5	0.05	0.7	300	20 3	.89	38.37	253.87
11/16/99 1	16231			13.65	45	28	13	3	12	20	8.9			2		21.99	77		1	1/8	13.00	9.62	0.6	0.2	1	300	20 3	3.90	37.76	262.20
11/17/99 1	16284	100	70	13.8	43	19	13	2	11	18	9.5			2		22.99	76		1	1/4	12.50	9.1	0.4	0.2	0.8	300	40 3	.85	45.74	264.02
11/18/99 1	16238	100	70	14.1	43	21	16	3	9	18	9.8			2		26.99	72		1	1/4	10.00	9.1	0.45	0.2	0.8	300	60 3	3.56	98.10	238.25
11/19/99 1	16242	98	70	15	48	45	20	6	16	25	10.0			-		27.99	71		1	1/4	12.50	9.2	0.5	0.25	0.8	300	40 3	.85	54.96	322.63
11/20/99 1	16265	100	70	14.9	45	27	17	4	10	17	10.2			2		25.99	71		3	1/2	10.00	9	0.4	0.3	0.8	300	40 4	.04	23.33	344.33
11/21/99 1	16308		70	15	45	28	12	3	9	16	10.0			2		26.99	68		5	1/2	10.00	9.1	0.4	0.3	0.8	300	40 3	.99	32.67	343.95
11/22/99 1	16308		70	15.1	43	26	13	3	10	15	10.0			2		26.99	68		5	1/2	10.00	9.1	0.45	0.3	0.8	300	40 4	.03	25.86	354.95
11/23/99	16308		70	15.1	43	27	13	2	9	15	10.0			2		26.99	68		5	1/2	10.00	9.1	0.4	0.3	0.8	300	40 4	.03	25.86	354.95
11/24/99	16308		45	15.1	58	42	18	5	14	17	9.7			2		26.99	68		5	1/2	10.00	9.35	0.45	0.15	0.9	300	40 4	.03	25.86	354.95
11/25/99	16308		55	15.3	47	32	20	5	9	15	9.5			2		27.99	67		5		10.00	9.36	0.4	0.15	0.8	300	40 4	.01	30.43	362.27
11/26/99	16308		60	15.5	45	28	16	4	9	13	9.4			2		28.49	66.5	1	5	1/2	10.00	9.13	0.4	0.125	0.8	300	40 4	.04	25.90	376.94
11/27/99	16308		65	15.1	44	27	19	6	12	17	9.3			2		27.99	67		5	1/4	11.00	8.93	0.35	0.1	0.8	300	40 3	3.92	44.06	340.25
11/28/99	16035		60	15	44	30	13	3	11	18	9.3			2		26.49	70.5		3	1/4	12.00	9.51	0.4	0.175	0.6	300	40 4	.03	25.62	347.99
11/30/99	16035	85	79	14.9	53	40	23	7	12	16	9.7	21	225	2	7	25.99	71	į	3	1/4	11.00	8.89	0.35	0.1	0.7	300	40 4	.04	23.33	344.33
12/1/99	16035		70	14.9	45	30	16	6	9	12	9.3			2		26.49	70		3.5	1/4	11.00	9.2	0.4	0.15	0.7	300	40 3	3.99	31.92	337.80
12/1/99	16035		70	15	47	29	11	5	8	12	10.0			2		26.99	70		3	1/4	10.00	9.5	0.5	0.3	0.6	300	40 3	3.97	34.72	340.64
12/2/99	16035		70	15.1	47	28	14	4	9	15	10.0	19.0	240	2	5	27.99	69		3	1/4	10.00	9.5	0.5	0.3	0.6	300	40 3	3.91	46.10	336.95
12/3/99	15567	100	70	15.1	47	27	19	7	11	16	9.6	16.0	220	2	5	27.99	69		3	1/4	10.00	9.4	0.5	0.3	0.7	300	40 3	3.91	46.10	336.95
12/4/99	15578		70	15.4	48	29	22	9	12	16	9.6	18.0	220	2	5	28.49	69		2.5	1/4	10.00	9.5	0.5	0.3	0.6	300	40 3	3.98	35.27	361.80
12/5/99	15640	100	70	15.3	48	28	17	12	16	19	9.4	15.0	220	2	4	28.99	69		2	1/2	12.50	9.1	0.4	0.15	0.5	300	40 3	3.89	51.70	342.61
12/6/99	15673	105	70	15,3	48	26	26	8	11		9.2	19	240	2	4	27.99	70		2	1/4	10.00	9.29	0.45	0.2	0.6	300	40 3	3.99	33.49	357.31
12/7/99	15698	105	70	15.3	45	27	20	6	12	16	9.5	19	220	2	5	27.99	70		2	1/4	10.00	9.3	0.45	0.2	0.65	300	40 3	3.99	33.49	357.31
	15729		65	15.7	47	32	20	5	8	12	9.2	18.5	220	2	5	29.49	68.5		2	.25	10.00	9.21	0.3	0.1	0.65	300	40 4	1.00	33.54	379.30
12/9/99	15935	104	73	15.4	42	32	20	5	8	11	9.4	14.8	220	2	5	27.99	70		2	< 1/8	10.00	9.13	0.3	0.1	0.65	300	40 4	1.03	26.68	368.32
12/10/99	16029		70	8.7	51	36	20	6	13	22	9.2	14.4	220	2	5	2.68	97.3			<1/8	13.00	9.35	0.3	0.15	0.65	300	40 2	2.57	24.84	-0.69
12/12/99	16060		63	15	45	31	15	4	8	12	9.1	13.8	220	2	5	26.49	71.5		2	<1/8	13.00	9.25	0.3	0.15	0.7	300	40 4	1.02	26.64	346.33
12/12/99	16096	89	73	14.5	62	50	26	6	8	11	7.2	13.5	220	1	4	24.99	72		3	<1/8	13.00	8.92	0.2	0.075	0.6	300	40 3	3.97	32.39	314.99
12/14/99	16212	92	77	14.4	48	35	18	5	8	12	7.3	13.3	220	1	4	24.99	70		5	<1/8	13.00	8.65	0.25	0.05	0.7	300	40 3	3.94	37 16	307.29
12/15/99	16278	79	56	14.4	49	35	20	5	8	11	71	13.2	220	1	4	24.99	70		5	1/8	13.00	8.8	0.3	0.05	0.6	300	40 3	3.94	37 16	307.29
12/15/99	16483	92	72	14.3	45	29	13	3	6	10	7.3	13.4	220	1	4	24.49	70.5		5	1/8	13.00	9.65	0.35	0.15	0.7	300	40 3	3.95	34.87	303.63
12/16/99	16513	92	70	14.4	46	30	16	4	7		7.8	14.0	220	1	4	24.99	70	1	5	1/4	10.00	9.5	0.5	0.3	0.7	300	40 3	3.94	37 16	307.29
12/17/99	16635	94	70	14.4	46	26	16	4	7		7.8	14	230	2	4	25.99	69		5	1/4	10.00	9.55	0.45	0.3	0.7	300	40 3	3.83	55.36	292.59
12/18/99	16733		70	14.5	47	30	18	4			7.8	13.8	230	2	4	25.99	69	1	5	1/8	10.00	9.7	0.55	0.3	0.8	300	40 3	3.87	48.55	303.60
12/19/99	16786	92	70	14.4	45	28	12	5	8	14	8.0	14.8	230	2	4	24.49	70.5	1	5	1/8	10.00	9.49	0.45	0.3	0.8	300	40 4	1.00	28.06	314.64

Report			Test		Funn			Gels	Gels	Gels			НТНР					Glycol	Oil	Sand		На	Alk	Alk	Alk	Chloride		ASG	LGS	HGS
Date	MD ft	Temp. F	lemp.	Wt.	sec/c		lbs/100ft2	10 sec lbs/100ft2	10 min lbs/100ft2	30 min lbs/100ft2	Filt.	cc	F	API	HTHP	crtd Pct.	Pct.	Pct.	Pct.	Pct.	ppb		Pm ml	Pf ml	Mf ml	Mg/I	Hdns mg/l		ppb	ppb
12/20/99	16865	96	70	14.4	46	28	12	4	8	14	7.8	13.9	230	1	4	24.49	70.5		5	1/8	10.00	9.55	0.5	0.3	0.8	300	40	4.00	28.06	314.64
12/21/99	16865	93	70	14.4	47	29	14	5	9	15	7.8	14.4	230	2	4	24.49	70.5		5	1/8	10.00	9.55	0.5	0.3	0.8	300	40	4.00	28.06	314.64
12/22/99	16876	93	70	14.5	48	30	12	4	7	14	7.8	15	230	2	4	24.99	70		5	1/8	10.00	9.55	0.5	0.3	0.8	300	40	3.99	30.34	318.30
12/23/99	16876		45	14.9	57	44	22	5	11	18	7.6	14.5	230	2	4	25.99	69		5	1/8	10.00	9.04	0.3	0.1	0.7	300	40	4.06	21.28	347.64
	16876		46	15	56	42	18	5	11	19	74	14.3	230	2	4	26.99	68		5	1/8	10.00	8.89	0.3	0.075	0.7	300	40	3.99	32.67	343.95
12/26/99	16876		44	14.5	52	35	16	4	10		7.6			2		24.99	71		4	1/8	11.00	8.65	0.3	0.05	0.7	300	30	ì	i	316.65
12/27/99	16876		53	14.3	56	40	25	6	14	22	9.1			2		24.49	72.5		3	1/8	12.00	8.59	0.25	0.05	0.7	300	30	3.93	36.92	300.32
12/28/99	16876		56	14.3	45	31	10	3	5	7	8.8	14.8	230	2	4	24.49	72.5		3	1/8	12.00	8.69	0.2	0.05	0.7	300	30	3.93	36.92	300.32
12/28/99	16876		40	14.3	43	26	8	1	2	4	8.7			2		24.49			3	1/8						300				300.32
12/29/99	16876		40	14.3	43	25	8	3	5	7	8.6			2		24.49	72.5		3	1/8				0.075	0.7	300	30	3.93	36.92	300.32
12/30/99	16876	84	65	14.4	48	35	12	3	4	8	8.8			2		24.99	72		3	1/8	12.00	8.57	0.25	0.05	0.7	300	30	3.92	39.20	303.98
12/31/99	16876		40	14.3	42	22	8	2	3		8.2			2		24.49	72.5		3	1/8	12.00	8.95	0.3	0.1	0.75	300	30	3.93	36.92	300.32
1/1/00	16876		40	14.3	44	27	10	3	4	8	8.1			2		24.49	72.5		3	1/8	L	8.74		0.075		300	30	3.93	36.92	300.32
1/2/00	16876		40	14.4	46	29	10	3	5	9	8.0			2		24,99	72		3	1/8				0.075	I	300				303.98
1/3/00	16876	66	64	14.4	52	37	13	4	7	13	8.8			2		25.49	71.5		3	1/8	·		0.25	0.05	0.8	300				296.63
1/4/00	16876		66	14.35	42	25	5	1	2	3	8.4			2		24.99	72		3	.125	12.00		0.3	0.2	0.7	300	30	3.90	42.61	298.48
1/5/00	16876		58	14.35	52	47	12	3	5	10	8.0			2		24.99	72		3	.125	12.50	8.9	0.35	0.15	0.7	300	30	3.90	42.61	298.48
1/6/00	16876	88	69	14.35	50	36	10	2	4	7	8.4			2		24.99	72		3		12.50	8.85	0.3	0.1	8.0	300	30	3.90	42.61	298.48



INTEO

Remarks, Recommendations and Problem log

Operator Well Name and No Contractor Rig Name/Number

8/4/99

8/5/99

UNOIN PACIFIC RESOURCES SIDEWINDER 1-H SST

88

Field or Block No Lease Offshore Area Legal description State

SIDEWINDER **SWEETWATER** 2-19N-97W **WYOMING**

Country USA

Recommendations **Date Remarks** SPUD W/WATER SWEEP HOLE AS NEEDED W/15 SX GEL/1 SX LIME NEW DRILL DOWN DRILL PIPE ON CONNECTIONS ONLY AS NEEDED SAPP AS NEEDED FOR BIT BALLING RUN ALL SOLIDS COTROL EQUIPMENT DUMP SAND TRAP AS NEEDED DUMP SAND TRAP ON CONNECTIONS WATER AS NEEDED TO KEEP VIS & WT AS LOW AS POSSIBLE SWEEP HOLE AS NEEDED 70-80 VIS W/15 SX GEL/1 SX LIME SAPP AS NEEDED FOR BIT BALLING DUMP AND CLEAN TANKS FILL W/RES PIT WATER ADD 10 SX LIME TO TANKS PRIOR TO

8/7/99

8/6/99

DRILL OUT WITH WATER

LET MUCH AS POSSIBLE CEMENT CONTAMINATED WATER GO TO RES

DUMPING TO HELP FLOC RES PIT

PIT

KEEP WT AS LOW AS POSS BY **DUMPING & DILUTION**

RUN ALL SOLIDS CONTROL EQUIP SWEEP HOLE AS NEEDED SAPP AS NEEDED FOR BIT BALLING

MUD UP @ +- 3700' FOR LOWER FT

8/8/99

KEEP WT AS LOW AS POSS BY DUMPING & DILUTION

RUN ALL SOLIDS CONTROL EQUIP SWEEP HOLE AS NEEDED SAPP AS NEEDED FOR BIT BALLING

MUD UP @ +- 3700' FOR LOWER FT UNION

8/9/99

CIRC RES PIT
ADD 8 SX LIME MORNING TOUR AND
4 SX LIME DAYLIGHTS
MIX POLYMER AT SUCTION 3
CANS/TOUR
SWEEP HOLE AS NEEDEDW/GEL AND
LIME
SAPP AS NEEDED FOR BIT BALLING

8/10/99

CIRC RES PIT
ADD 4 SX LIME / TOUR TO RES PIT
MIX POLYMER AT SUCTION 3
CANS/TOUR
SAPP AS NEEDED FOR BIT BALLING
MUD UP DEPTH AS PER CO MAN
GEL FOR 32-34 VIS
2 SX CAUSTIC 1 HR /SX
2 SX MIL PAC 1 HR /SX
AFTER ALL GEL IS ADDED MIX 18 SX
NEW DRILL PLUS, OVER 6 HRS

8/11/99

CIRC RES PIT
ADD GYPSUM 10 SX ON DAYLIGHTS
SWEEP HOLE ONC /TOUR AT
BEGINNING OF TOUR 200 BBLS 100+
VIS
SAPP AS NEEDED FOR BIT BALLING
MUD UP DEPTH AS PER CO MAN
GEL FOR 32-34 VIS
2 SX CAUSTIC 1 HR /SX
2 SX MIL PAC 1 HR /SX
AFTER ALL GEL IS ADDED MIX 18 SX
NEW DRILL PLUS, 30 MIN /SX

8/12/99

CIRC RES PIT ADD GYPSUM 10 SX ON DAYLIGHTS SWEEP HOLE ONC /TOUR AT

BEGINNING OF TOUR 200 BBLS 100+ VIS SAPP AS NEEDED FOR BIT BALLING MUD UP DEPTH AS PER CO MAN GEL FOR 32-34 VIS 2 SX CAUSTIC 1 HR /SX 2 SX MIL PAC 1 HR /SX AFTER ALL GEL IS ADDED MIX 20 SX NEW DRILL PLUS, 30 MIN /SX

8/13/99

CIRC RES PIT
ADD GYPSUM 10 SX ON DAYLIGHTS
SWEEP HOLE ONC /TOUR AT
BEGINNING OF TOUR 200 BBLS 100+
VIS
SAPP AS NEEDED FOR BIT BALLING
MUD UP DEPTH AS PER CO MAN
GEL FOR 32-34 VIS
2 SX CAUSTIC 1 HR /SX
2 SX MIL PAC 1 HR /SX
AFTER ALL GEL IS ADDED MIX 20 SX
NEW DRILL PLUS, 30 MIN /SX

8/14/99

CIRC RES PIT
TRICKLE 3 CANS POLY AT SUCTION
PER TOUR
ADD GYPSUM 10 SX ON DAYLIGHTS
SWEEP HOLE ONC /TOUR AT
BEGINNING OF TOUR 200 BBLS 100+
VIS
SAPP AS NEEDED FOR BIT BALLING
MUD UP DEPTH AS PER CO MAN
GEL FOR 32-34 VIS
2 SX CAUSTIC 1 HR /SX
2 SX MIL PAC 1 HR /SX
AFTER ALL GEL IS ADDED MIX 20 SX
NEW DRILL PLUS, 30 MIN /SX

8/15/99

CIRC RES PIT
TRICKLE 3 CANS POLY AT SUCTION
PER TOUR
ADD GYPSUM 10 SX ON DAYLIGHTS
SWEEP HOLE ONC /TOUR AT
BEGINNING OF TOUR 200 BBLS 100+
VIS
SAPP AS NEEDED FOR BIT BALLING
MUD UP DEPTH AS PER CO MAN
GEL FOR 32-34 VIS
2 SX CAUSTIC 1 HR /SX
2 SX MIL PAC 1 HR /SX
AFTER ALL GEL IS ADDED MIX 20 SX
NEW DRILL PLUS, 30 MIN /SX

8/16/99

GEL AS NEEDED FOR 32-34 VIS ADD 2 SX LIME 1SX/HR AFTER GEL IS IN

LIME 1 SX /TOUR HRS/SX
WATCH FOR HOLE TAKING FLUID
MIX LCM SWEEPS IF NEEDED
5SX MIL SEAL
5SX MICA COARSE
5SX MICA FINE
5SX NUT PLUG
2SX CELOPHANE
TOOH BIT #6 TIGHT AT 4849-4226'
TIH TIGHT AT 2792-2886,3168,3325'
W&R 140' TO BTM MUDDING UP NO
FLUID LOSSES

8/17/99

GEL AS NEEDED FOR 32-34 VIS SMOOTH OUT LOWS & HIGHS

RUN ALL SOLIDS CONTROL EQUIP
PIT WATER 15 GPM DUMP SAND
TRAP AS NEEDED
SWEEP HOLE ONCE /TOUR 20 BBLS
100+ VIS 10SX GEL TO1SX LIME
WATCH FOR HOLE TAKING FLUID
MIX LCM SWEEPS IF NEEDED
5SX MIL SEAL
5SX MICA COARSE
5SX MICA FINE
5SX NUT PLUG
2SX CELOPHANE
TOOH BIT #6 TIGHT AT 4849-4226'
TIH TIGHT AT 2792-2886,3168,3325'
W&R 140' TO BTM MUDDING UP NO
FLUID LOSSES

8/18/99

GEL AS NEEDED FOR 36 VIS
RUN ALL SOLIDS CONTROL EQUIP
PIT WATER 15 GPM DUMP SAND
TRAP AS NEEDED
SWEEP HOLE ONCE /TOUR 20 BBLS
100+ VIS 10SX GEL TO1SX LIME
WATCH FOR HOLE TAKING FLUID
MIX LCM SWEEPS IF NEEDED
5SX MIL SEAL
5SX MICA COARSE
5SX MICA FINE
5SX NUT PLUG
2SX CELOPHANE

8/20/99

GEL AS NEEDED FOR 39-40

RIG WATER 6-8 GPM CAUSTIC 1SX /TOUR 3 HRS /SX RUN DESANDER/MUD CLEANER WATCH FOR LOSSES IN HOLE SET PIT MARKERS

CIRC & RAISE WT TO 9 6 3100 UNITS GAS W&R 30' FILL AFTER TRIP F/BIT #7

8/21/99

GEL AS NEEDED FOR 40 VIS BAR AS NEEDED FOR 9 7-9 8

RIG WATER 6-8 GPM CAUSTIC 1SX /TOUR 3 HRS /SX RUN DESANDER/MUD CLEANER WATCH FOR LOSSES IN HOLE SET PIT MARKERS

8/22/99

GEL AS NEEDED FOR 40 VIS BAR AS NEEDED FOR 10 1

PIT WATER 10-12 GPM CAUSTIC 1SX /TOUR 3 HRS /SX DUMP SAND TRAP AS NEEDED WATCH FOR LOSSES IN HOLE SET PIT MARKERS

8/23/99

GEL AS NEEDED FOR 40 VIS BAR AS NEEDED FOR 10 1

PIT WATER 10-12 GPM CAUSTIC 1SX /TOUR 3 HRS /SX DUMP SAND TRAP AS NEEDED WATCH FOR LOSSES IN HOLE SET PIT MARKERS

8/24/99 TRIPPED FOR BIT #10

NO PROBLEMS ON TRIP LOST ABOUT 75 BBLS ON TRIP

GEL AS NEEDED FOR 40 VIS BAR AS NEEDED FOR 10 1

PIT WATER 10-12 GPM CAUSTIC 1SX /TOUR 3 HRS /SX DUMP SAND TRAP AS NEEDED

8/25/99

GEL AS NEEDED FOR 40 VIS BAR AS NEEDED FOR 10 1

PIT WATER 10-12 GPM CAUSTIC 1SX /TOUR 3 HRS /SX DUMP SAND TRAP AS NEEDED

8/26/99

GEL AS NEEDED FOR 40 VIS BAR AS NEEDED FOR 10 1

PIT WATER 10-12 GPM CAUSTIC 2SX /TOUR 3 HRS /SX DUMP SAND TRAP AS NEEDED

8/26/99

GEL AS NEEDED FOR 40 VIS BAR AS NEEDED FOR 10 4

PIT WATER 10-12 GPM CAUSTIC 2SX /TOUR 3 HRS /SX DUMP SAND TRAP AS NEEDED

8/27/99

GEL AS NEEDED FOR 40 VIS BAR AS NEEDED FOR 10 4

PIT WATER 10-12 GPM DUMP SAND TRAP AS NEEDED

8/29/99

GEL AS NEEDED FOR 40 VIS BAR AS NEEDED FOR 10 4 CAUSTIC 2 SX /TOUR 2 5 HRS/SX LIGCO 5 SX/TOUR 30 MIN/SX PIT WATER 10-12 GPM DUMP SAND TRAP AS NEEDED

8/30/99 LOST 91 BBLS ON TRIP NO PROBLEMS ON TRIP SEE ENGINEER ON LOCATION

8/31/99

SEE ENGINEER ON LOCATION

SHUT OFF BARITE RECOVRY @ 21 00 ON 8-30 RUNNING #2 CENTRIFUGE ON ACTIVE SYSTEM TO LOWER SOLIDS BACTERIA BOTTLES SHOT ON 8-30-99 HAVE TURNED ON THE RESEVRE PIT

(BOTH TYPES)

10/13/99

SEE ENGINEER ON LOCATION

9/2/99

SEE ENGINEER ON LOCATION

WILL RUN HIGH VIS/LCM SWEEP

AFTER SHORT TRIP

9/3/99 SEE ENGINEER ON LOCATION RUN A 200 BBL HIGH VIS SWEEP WHEN ON BOTTOM* NO SAWDUST IN **SWEEP** SEE ENGINEER ON LOCATION 9/4/99 10/14/99 SEE ENGINEER ON LOCATION 9/6/99 SEE ENGINEER ON LOCATION SEE ENGINEER ON LOCATION 9/7/99 SEE ENGINEER ON LOCATION 9/8/99 SEE ENGINEER ON LOCATION 9/9/99 9/10/99 SEE ENGINEER ON LOCATION 9/11/99 SEE ENGINEER ON LOCATION

9/12/99	DRILLED BENTONIT STRINGRS
	TREATED RESVERE PIT FOR BACTERIA

CAUSTIC 3 SX /TOUR 2 HRS /SX LIGCO 10SX ON MORNING TOUR DRILL THIN 3 SX DAYLIGHTS 40 MIN/SX NEW VIS IF NEEDEDFOR EXTRA VIS WATER 6-8 GPM

9/13/99 TRIPPED FOR BIT #15 WASHED 20' TO BTM

CAUSTIC 3 SX /TOUR 2 HRS /SX

DRILL THIN 3 SX /TOUR 45MIN/SX NEW VIS IF NEEDEDFOR EXTRA VIS WATER 10 GPM

9/14/99 BENTONITE STRINGERS & TEMP EFFECTING MUD

CAUSTIC 3 SX /TOUR 2 HRS /SX MIL PAC 2SX /TOUR 3 HRS /SX LIME 2 SX /TOUR 3 HRS/SX DRILL THIN 3 SX /TOUR 45MIN/SX NEW VIS IF NEEDEDFOR EXTRA VIS WATER 8-10 GPM

9/15/99 DRILLED AHEAD ENCOUNTRED FRACTURES RAISED WT FOR BGG

LIME 3SX/TOUR 3 HRS/SX MIL PAC 2SX /TOUR 3 HRS /SX LIME 3 SX /TOUR 3 HRS/SX

NEW VIS IF NEEDEDFOR EXTRA VIS WATER 8-10 GPM

9/16/99

LIME 3SX/TOUR 3 HRS/SX MIL PAC 2SX /TOUR 3 HRS /SX TEC THIN 6SX /TOUR 1HR/SX

NEW VIS IF NEEDEDFOR EXTRA VIS WATER 8-10 GPM

MIL PAC 2SX /TOUR 3 HRS /SX TEC THIN 6SX /TOUR 1HR/SX MIL PAC R 2SX/TOUR 1 5HRS/SX NEW VIS IF NEEDEDFOR EXTRA VIS WATER 8-10 GPM

9/18/99 NO PROBLEMS ON TRIP'S SLOW ROP TOH

LIME 3SX/TOUR 3 HRS/SX
MIL PAC 2SX /TOUR 3 HRS /SX
TEC THIN 6SX /TOUR 1HR/SX
MIL PAC R 2SX/TOUR 1 5HRS/SX
NEW VIS IF NEEDEDFOR EXTRA VIS
WATER 8-10 GPM

9/19/99 LOST ? 300BBLS MUD ON TRIP F/BIT #17 MIXED LCM SWEEP CURED LOSSES WHILE DRILLING TOOH F/BIT #18 CAUSTIS 3SX/TOUR 3 HRS/SX MIL PAC 2SX /TOUR 3 HRS /SX TEC THIN 6SX /TOUR 1HR/SX MIL PAC R 2SX/TOUR 1 5HRS/SX NEW VIS IF NEEDEDFOR EXTRA VIS WATER 8-10 GPM

9/20/99 NO PROBLEMS ON TOOH, BIT MISSING 3 CONES TH W/FISHING TOOLS W&R 15' O O GAUGE HOLE TOOH TREATED FOR BACTERIA CAUSTIS 3SX/TOUR 3 HRS/SX MIL PAC 2SX /TOUR 3 HRS /SX TEC THIN 6SX /TOUR 1HR/SX MIL PAC R 2SX/TOUR 1 5HRS/SX NEW VIS IF NEEDEDFOR EXTRA VIS WATER 8-10 GPM

10/26/99 NO RECOVERY ON CONES TRIP IN WITH MILL

CAUSTIS 3SX/TOUR 3 HRS/SX MIL PAC 2SX /TOUR 3 HRS /SX TEC THIN 6SX /TOUR 1HR/SX MIL PAC R 2SX/TOUR 1 5HRS/SX NEW VIS IF NEEDEDFOR EXTRA VIS WATER 8-10 GPM

9/22/99 DID NOT RECOVER CONES TRIPPED IN WITH BIT TO DRILL CAUSTIS 3SX/TOUR 3 HRS/SX MIL PAC 2SX /TOUR 3 HRS /SX TEC THIN 6SX /TOUR 1HR/SX

MIL PAC R 2SX/TOUR 1 5HRS/SX NEW VIS IF NEEDEDFOR EXTRA VIS WATER 8-10 GPM

9/23/99 DRILLING AHEAD NO PROBLEMS ADDED 200 BBLS OF RESVERE PIT WATER CAUSTIS 3SX/TOUR 3 HRS/SX MIL PAC 2SX /TOUR 3 HRS /SX TEC THIN 6SX /TOUR 1HR/SX MIL PAC R 2SX/TOUR 1 5HRS/SX NEW VIS IF NEEDEDFOR EXTRA VIS WATER 8-10 GPM

9/24/99 DRILLED AHEAD
RAISEDMUD WEIGHT TO HOLD BACK GAS
FROM FRONTIER FORMATION

CAUSTIS CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

9/25/99 DRILLED AHEAD NO PROBLEMS

CAUSTIS CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

9/26/99 DRILLED TO 15750'
RAN SHORT TRIP THROUGH OPEN
HOLE RAISED MUD WEIGHT TO HOLD BACK GAS
RAN GYRO-NO PROBLEMS
TRIPPING OUT FOR LOGS

CAUSTIS CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

9/27/99 MUD IS CEMENT CONTAMINATED (SLIGHT)
USING FRESH WATER TO LOWER
MUD WEIGHT TO 14 9 SHOULD BRING
FLOW PROPERTIES BACK IN LINE
OTHER THAN WATER NO OTHER TREATMENT
FOR CEMENT SHOULD BE NEEDED

CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

RAN LOGS-NO PROBLEMS
TRIPPED IN&SET 1,000' CEMENT PLUG NO PROBLEMS
ON TRIP

LOGS SHOWAN AVERAGE HOLE SIZE OF 10"

CIRC BTMS UP TOH FOR BHA FOR CURVE

9/29/99 WASH 14152-14580' DRLG CEMENT 14580-14900' CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

9/30/99 TRIPPED FOR DIRECTIONAL BHA

CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

10/1/99

CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

10/2/99

CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

10/3/99 TIME DRILLED TO START KICKOFF

CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

10/4/99 SLIDE DRILLING ADDED 1208 GAL DIESEL TO BRING % UP TO 5% CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

10/5/99 SLIDE DRLG 15051-15136

CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

10/6/99 TRIPPED FOR BIT #21 AND CHG DGREE ON MOTOR CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED MWD NOT READING TOOH CHECK WITH MUD ENGINEER 10/7/99 NO PROBLEMS DRLD TO 15216 DUMP SAND TRAP AS NEEDED 10/8/99 CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED 10/9/99 CHECK WITH MUD ENGINEER 10/10/99 DUMP SAND TRAP AS NEEDED CHECK WITH MUD ENGINEER 10/11/99 DUMP SAND TRAP AS NEEDED 10/12/99 DUMPED AND CLEANED SAND TRAPS TWICE 150BBLS CHECK WITH MUD ENGINEER CHANGD SHAKER SCREENS ON 1 TO 210/210 INCREASE IN FLOWLINE TEMP TO 140 DUMP SAND TRAP AS NEEDED

10/13/99 AT 15434 TVD & 15372 TVD SAW A 4 DEGREE TEMP INCREASE DOWN HOLE & A 12 DEGREE FLOWLINE TEMP INCREASE ALSO A INCREASE OF 6 SEC IN VIS ADDING THINNERS	CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED
10/14/99 W&R 40FT TO BTM LAST 5FT OUT OF GAUGE	CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED
10/15/99 DRILLED TO 15541 68 DEGREE ANGLE TOOH CHG BHA TO REAM OUT CURVE TO 9 875"	CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED
10/16/99 REAM 15026 - 15537 BACK REAM 15537 -14975 TOOH PK UP HYD OPER REAMER TIH	CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED
10/17/99 REAM 14976 - 15541 PUMP SWEEP NO GREAT INCREASE IN CUTTINGS SPOT 25#/BBL BEADS IN CURVE TOOH TO RUN LINER SPOTTED 10 GAL XC102 THROUGHOUT HOLE	CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED
10/18/99 CUTTER O D ON REAMER 8 75 TIH W/NEW REAMER REAM F/15450' - 15541' PUMP SWEEP SPOT 25#/BBL BEADS THRU CURVE TOOH	CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED
10/19/99 RUN LINER HUNG UP 40" OFF BTM CIRC & WORK PIPE FREE SET ON BTM CMT	CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

10/20/99 TOOH PK UP 8 5" BIT TIH DRESS CMT TO TOP OF CHECK WITH MUD ENGINEER LINER DUMP SAND TRAP AS NEEDED 10/31/99 CHECK WITH MUD ENGINEER **DUMP SAND TRAP AS NEEDED** 10/22/99 TESTED BOP PKUP 4" DP TIH TO TOP OF LANDING CHECK WITH MUD ENGINEER COLLAR 15451' DRLG CMT ADDING WATER & BAR TO DUMP SAND TRAP AS NEEDED **REBUILD MUD** AFTER DRLG CMT 10/23/99 TOH AFTER DRLG CMT PKUP BHA TIH DRLG AHEAD CHECK WITH MUD ENGINEER REBUIDING VOL CLEANING CMT CONTAMINATED PITS DUMP SAND TRAP AS NEEDED 10/24/99 DRLG 15618 TRP F/ BIT CHECK WITH MUD ENGINEER **DUMP SAND TRAP AS NEEDED** 10/25/99 DRL AHEAD CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED 10/26/99 AS PER CO MAN ORDERS NO MORE ZANPLEX ONLY CHECK WITH MUD ENGINEER GEL BAR CAUSTIC AND MIN PAC DUMP SAND TRAP AS NEEDED

11/27/99 RAISED MUD WT TO 14 5 HAVING TO BACK REAM ON CONNECTIONS RAISED OIL TO 5%

CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

10/28/99 REAM 15711' TO BTM 15875 WELL SEEPING LOST 200 BBL DRILL TO 15916' TOH BIT 31 CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

10/29/99 TIH HOLE W/BIT #31
REAM 15685- 15916' SLIGHT SEEPAGE TODAY
DRILLED AHEAD 15916-15965'
HOLE DRAGGING SPOTTED 25 BBL MIL LUBE & BEADS
WORKED INTO HOLE STARTED PUMPING & DRILLING
AGAIN

CHECK WITH MUD ENGINEER DUMP SAND TRAP AS NEEDED

10/30/99 ADDED 400 GALS DIESEL TOOH F/BIT #32 REAM FROM 5916/15965' DRILLED AHEAD 16016' BAR AS NEEDED FOR 14 1 WT GEL AS NEEDED FOR 45 VIS MIL PAC R 1SX /TOUR 400 MIN/SX WATER 8 GPM DUMP SAND TRAP AS NEEDED

10/31/99 BIT CAME OUT TOP OF FORMATION MOVE UP HOLE TO 15675-15700' TO SIDE TRACK OUT BTM

BAR AS NEEDED FOR 14 1 WT GEL AS NEEDED FOR 45 VIS MIL PAC R 1SX /TOUR 334 MIN/SX WATER 8 GPM DUMP SAND TRAP AS NEEDED

11/1/99 TOOH F/BIT #33 TIH TO 15660' TIME DRILL TO SIDE TRACK OUT BTM BAR AS NEEDED FOR 14 1 WT GEL AS NEEDED FOR 45 VIS MIL PAC R 1SX /TOUR 334 MIN/SX 11/2/99 TRIP F/BIT #34 SIDE TRACK BIT SIDE TRACKING OUT BTM AT 15660'

BAR AS NEEDED FOR 14 1 WT GEL AS NEEDED FOR 45 VIS MIL PAC R 1SX /TOUR 334 MIN/SX WATER 8 GPM DUMP SAND TRAP AS NEEDED

11/3/99 ADDED 1400 GALS DIESEL COULD SIDE TRACK AT 15660 MOVED UP HOLE TO 15600', TRY AGAIN BAR AS NEEDED FOR 14 1 WT GEL AS NEEDED FOR 45 VIS MIL PAC R 1SX /TOUR 334 MIN/SX WATER 8 GPM DUMP SAND TRAP AS NEEDED

11/4/99 TIME DRILL I/INCH TO 10 MIN 15600-15604'
TIME DRILL 10MIN/INCH 15604-15605'
TIME DRILL 5 MIN/INCH 15605-15610'
TIME DRILL 5 MIN/INCH 15610-15614'
LOST ORIENT
ORIENT TOOL FACE @15613'
TIME DRILL 5 MIN/INCH 15612-15613'

BAR AS NEEDED FOR 14 1 WT GEL AS NEEDED FOR 45 VIS MIL PAC R 1SX /TOUR 334 MIN/SX WATER 8 GPM DUMP SAND TRAP AS NEEDED

11/5/99 TIME DRILL 5 MIN/INCH 15613-15614'
PUMP PILL/TOOH W/CHAIN
TIH FILL EVERY45 STDS
ORIENT TOOL/NOT GETTING PULSE
PUMP PILL/TOOH

BAR AS NEEDED FOR 14 1 WT GEL AS NEEDED FOR 45 VIS MIL PAC R 1SX /TOUR 334 MIN/SX WATER 2-4 GPM DUMP SAND TRAP AS NEEDED

11/6/99 TOOH TIH TIME DRILL FROM 15612-15622' PUMP PILL /TOOH BAR AS NEEDED FOR 14 1 WT GEL AS NEEDED FOR 45 VIS MIL PAC R 1SX /TOUR 334 MIN/SX WATER 2-4 GPM DUMP SAND TRAP AS NEEDED 11/7/99 TOOH CHANGE MUD MOTOR

TIH ORIENT TOOL TIME DRILL 15620-15622' 5

MIN/INCH

TIME DRILL 15622-15625' 5 MIN/INCH

SLIDE W/25000 15625-15630' MOTOR STALLING REORIENT

DRILL SLID 15630-15662

ROTATE 15662-15664 SLIDE 15664-15666

BAR AS NEEDED FOR 14 1 WT GEL AS NEEDED FOR 45 VIS MIL PAC R 1SX /TOUR 334 MIN/SX WATER 2-4 GPM

DUMP SAND TRAP AS NEEDED

11/8/99 ORIENT TRY SLIDE STALLING

ROTATE 15666-15669' SLIDE 15669-15738 SLIDE 15738-15739 ROTATE 15739-15870 CIRC BTMS UP PUMP PILL TOOH

BAR AS NEEDED FOR 14 1 WT GEL AS NEEDED FOR 45 VIS MIL PAC R 1SX /TOUR 334 MIN/SX WATER 2-4 GPM DUMP SAND TRAP AS NEEDED

11/9/99 TOOH

CHANGE BIT TEST MOTOR WORK BLINDS 5"&4" & HYD TIH FILL PIPE, ORIENT THROUGH SIDE TRACK

REAM TO BTM

DRILL SLID 15870-15875' ROTATE 15875-15885' SLIDE 15885-15895' ROTATE 15895-15929' CIRC UP SAMPLE

DRILL ROTATE 15929-15959'

BAR AS NEEDED FOR 14 1 WT **GEL AS NEEDED FOR 45 VIS** MIL PAC R 1SX /TOUR 334 MIN/SX WATER 2-4 GPM DUMP SAND TRAP AS NEEDED

11/10/99 CIRC BTMS UP

TOOH L/D BHA

P/U CORE BARREL

CUT DRILL LINE 110'

TIH

WASH /15616-15687'

+ 10' TOBTM

CORING 15959-15996' DT#84362 \$369 60

DT#84358 \$397 60

BAR AS NEEDED FOR 14 1 WT

GEL 5SX TOURLY OR AS NEEDED

FOR 45 VIS

MIL PAC R 1SX /TOUR 334 MIN/SX WATER 2-4 GPM

DUMP SAND TRAP AS NEEDED

11/11/99 TIH

MWD NOT WORKING TOOH CHNG TOOL TIH

BAR AS NEEDED FOR 14 1 WT GEL 5SX TOURLY OR AS NEEDED

FOR 45 VIS

MIL PAC R 1SX /TOUR 334 MIN/SX

WATER 2-4 GPM

DUMP SAND TRAP AS NEEDED

11/11/99 TIH TEST MWD WASH THRU SIDETRACK REAM AND LOG CORED SECTION DRILL AHEAD

BAR AS NEEDED FOR 13 5 WT CAUSTIC 1SX/TOUR 5HRS/SX GEL 5SX TOURLY OR AS NEEDED DT #84356 \$212 50

FOR 45 VIS MIL PAC R 1SX /TOUR 5HRS/SX WATER 2-4 GPM DUMP SAND TRAP AS NEEDED

11/12/99 TOOH F/BIT #40 WASH F/16050 -16100' REAM OUT OF GAUGE HOLE 16100 - 16143' DRILL AHEAD BAR AS NEEDED FOR 13 5 WT CAUSTIC 1SX/TOUR 5HRS/SX GEL 5SX TOURLY OR AS NEEDED FOR 45 VIS MIL PAC R 1SX /TOUR 5HRS/SX WATER 2-4 GPM DUMP SAND TRAP AS NEEDED

11/13/99 DRILL AHEAD TO 16231' MWD FAILURE TOOH CHG BHA TIH W/ BIT #41 BAR AS NEEDED FOR 13 5 WT CAUSTIC 1SX/TOUR 5HRS/SX GEL AS NEEDED FOR 45 VIS WATER 3-4 GPM DUMP SAND TRAP AS NEEDED

11/14/99 TIH W/BIT #41
TIH TO SIDETRACK MWD FAILURE
TOOH CHG BHA TIH TO SIDETRK
BHA FAILURE TOOH

BAR AS NEEDED FOR 13 5 WT CAUSTIC 1SX/TOUR 5HRS/SX GEL AS NEEDED FOR 45 VIS WATER 3-4 GPM DUMP SAND TRAP AS NEEDED

11/16/99 TOOH WET CK F/HOLE IN PIPE CHG OUT BHA TIH TO SIDETRACK MWD FAILURE TOOH BAR AS NEEDED FOR 13 5 WT CAUSTIC 1SX/TOUR 5HRS/SX GEL AS NEEDED FOR 45 VIS WATER 10 GAL/MIN TO REBUID VOL DUMP SAND TRAP AS NEEDED

11/16/99 TOOH LAY DOWN MWD TOOLS WAIT ON NEW MWD CO BUILT VOL IN TANKS BACK

BAR AS NEEDED FOR 13 5 WT CAUSTIC 1SX/TOUR 5HRS/SX GEL AS NEEDED FOR 45 VIS 11/17/99 WAIT ON NEW MWD, RIG UP MWD,P/UBHA PULSE TEST

TIH FILL PIPE37-73 STDS ORIENT IN HOLE REAM TO BTM F/ 15778-15816', F/ 16123-16233' DRLG NO DIFF PRESS, ON MOTOR KEPT STALLING OUT TOP DRIVE PULL INTO CASING, MIX PUMP PILL TOOH BAR AS NEEDED FOR 13 9 WT CAUSTIC 1SX/TOUR 5HRS/SX GEL 5 SX TOURLY OR AS NEEDED FOR 45 VIS WATER 3-GAL/MIN DUMP SAND TRAP AS NEEDED

DT #84378 \$379 40

REQUEST

DT #84373 \$360 50

11/18/99 TOOH LAY DOWN MOTOR, PU/MOTOR ORIENT TEST TIH FILL PIPE, ORIENT INTO SIDE TRACK, TIH SLOW, TRY ROTATE @ 16197' STALL TOP DRIVE TOH 4 STDS REAM F/15816-16233' ROTATE 16233-16238' ORIENT TOOL FACE

DT#84383 \$359 10 DT#84384 \$329 00 RAISING MUD WEIGHT TO 15 0 PPG AT CO-MANS BAR AS NEEDED FOR 15 0-15 1 WT CAUSTIC 1SX/TOUR 5HRS/SX GEL 5 SX TOURLY OR AS NEEDED FOR 45 VIS WATER 3-GAL/MIN DUMP SAND TRAP AS NEEDED RAISING MUD WEIGHT TO 15 0 PPG AT CO-MANS REQUEST

11/19/99 DRLG SLIDE 16238-16240', VERY STICKY
SPOT MIL LUBE WITH BEADS WORK PIPE
PULL 7 STDS TO CSG RAISE MUD WEIGHT TO 15 0
PPG TIH
TO 15816 REAM AND LOG TO 16240', DRILL BOTATE

TO 15816 REAM AND LOG TO 16240' DRILL ROTATE 50-100 DIFF WOULD NOT DRILL OFF LOST CIRCULATION, APPROX 230 BBLS CIRC PUMP LCM PILL SPOT ON BTM PULL 7 STDS TO CSG BUILD 100 BBLS ANDPUMP PILL TOOH

BAR AS NEEDED FOR 15 0-15 1 WT CAUSTIC 1SX/TOUR 5HRS/SX GEL 5 SX TOURLY OR AS NEEDED FOR 45 VIS WATER 3-GAL/MIN DUMP SAND TRAP AS NEEDED DT#84386 \$566 70 DT#84387 \$378 00

11/20/99 MIX PILL TOOH L/D MOTOR TST CHOKE AND MANIFOLD 10,00PSI

P/U MOTOR ORIENT TEST CHANGE MWD TIH FILLING PIPE ORIENT INTO SIDE TRACK REAM F/16195-16240' LOGGINGWHILE REAMING ROTATE 16240-16245' SLIDE 16245-16260' LOST APPROX 130 BBLS ON TRIP TO SEEPAGE REBUILD VOL 230 BBLS BAR AS NEEDED FOR 15 0-15 1 WT CAUSTIC 1SX/TOUR 5HRS/SX GEL 5 SX TOURLY OR AS NEEDED FOR 45 VIS MIL PAC R 1 SX /TOUR @ 6HRS WATER 3-GAL/MIN DUMP SAND TRAP AS NEEDED DT#152092 \$814 32 11/21/99 16260-16270' SLIDE ROTATE 16270-16288', CIRC SURVEY SLIDE

16288-16303', ROTATE 16303-16308' CIRC TRY ROTATE MOTOR STALLING, WORK TIGHT HOLE16308-16263' PULL UP TO CASING

PUMP PILL TOOH L/D MOTOR BIT GONE ADDED 4200 GALS DIESEL TO MUD MIXED MIL LUBE AND LUBRIBEADS IN SWEEP WHILE WORKING TIGHT HOLE

BAR AS NEEDED FOR 15 0-15 1 WT CAUSTIC 1SX/TOUR 5HRS/SX GEL 5 SX TOURLY OR AS NEEDED FOR 45 VIS MIL PAC R 1 SX /TOUR @ 6HRS WATER 3-GAL/MIN DT#84395 \$339 50 DT#84393 \$352 80

11/22/99 TEST BOP
TIH SLM WITHFISHING TOOLS CUT DRILLING LINE

BAR AS NEEDED FOR 15 0-15 1 WT CAUSTIC 1 SX /TOUR 5 HRS/SX GEL 5 SX TOURLY OR AS NEEDED FOR 45 VIS MIL PAC R 1 SX/TOUR @ 5 HRS WATER 3 GLS PER MIN DT#84392 \$358 4 DT384394 \$380 10

11/23/99 TIH WASH OVER FISH TOOH (CHAIN OUT WET) BREAK DOWN TOOL BUILD VOL WET TRIP LOST 350 BBLS MUDTIH DT#84502 \$371 00

BAR AS NEEDED FOR 15 0-15 1 WT CAUSTIC 1 SX /TOUR 5 HRS/SX GEL 5 SX TOURLY OR AS NEEDED FOR 45 VIS MIL PAC R 1 SX/TOUR @ 5 HRS WATER 3 GLS PER MIN

11/24/99 TIH W/FISH TLS WASH OVER FISH JAR FREE MOVE UP HOLE TIGHT AGAIN GO BACK TO BTM TOOH DIDN'T RECOVER FISH BAR AS NEEDED FOR 15 1 WT GEL AS NEEDED FOR 45 VIS CAUSTIC 1SX/TOUR 5HRS/SX WATER 3GAL/MIN

11/25/99 TIH W/FISHING TOOLS 6 375" 0D COULDN'T GET THRU SHOE TOOH LEFT FISHING ASSEMBLY IN HOLE PK UP NEW TLS TIH TO FISH LATCH ON TOOH

PK UP TLS F/BTM OF MTR TIH

BAR AS NEEDED FOR 15 1 WT GEL AS NEEDED FOR 45 VIS CAUSTIC 1SX/TOUR 5HRS/SX WATER 3GAL/MIN

11/26/99	TOOH NO FISH W O TLS	TIH LATCH ONTO FISH TOOF	1
	RETREIVED FISH		

H BAR AS NEEDED FOR 15 1 WT GEL AS NEEDED FOR 45 VIS CAUSTIC 1SX/TOUR 5HRS/SX WATER 3GAL/MIN

11/27/99 TIH PUSH ROTOR AND BIT TO BTM PUMP SWEEPS 25BBLS 150+, 15BBLS H2O, 25 BBLS 150+, 15 BBLS H2O 25BBLS 150+ NO LARGE CUTTINGS RETREIVED TOOH PK UP TLS TO SIDE TRACK AROUND FISH

BAR AS NEEDED FOR 15 1 WT **GEL AS NEEDED FOR 45 VIS** CAUSTIC 1SX/TOUR 5HRS/SX WATER 5 GAL/MIN

11/28/99 TIH STOP AT 16035 TO ORIENT FOR 1st SIDE TRACK PIPE GOT STUCK WORK PIPE PUMP SWEEP SPOT OIL WAIT AND WORK PIPE

BAR AS NEEDED FOR 15 1 WT GEL AS NEEDED FOR 45 VIS CAUSTIC 1SX/TOUR 5HRS/SX WATER 5 GAL/MIN

11/30/99 BACK OFF AT 15241' TOOH F/COLLARS AND JARS TIH LATCH ON JAR, NO MOVEMENT SPOT 50 BBL BLACK MAGIC WORK PIPE DT # 84504,84505,84514,84516

BAR AS NEEDED FOR 15 1 WT GEL AS NEEDED FOR 45 VIS CAUSTIC 1SX/TOUR 5HRS/SX WATER 5 GAL/MIN

12/1/99 CHECK FOR FREE POINT 15605' HAD TO PUMP TOOLS BAR AS NEEDED FOR 15 1 WT TO BTM RESPOTTED 50 BBLS BLACK MAGIC BACK OFF 1 INSIDE OF CSG TOOH F/ TOOLS

GEL AS NEEDED FOR 45 VIS CAUSTIC 1SX/TOUR 5HRS/SX WATER 5 GAL/MIN

12/1/99 CIRC JAR ON FISH @15221' SPOT BLACK MAGIC, P/U BAKER TOBACK OFF@15506' TOOH L/D FISHING TOOLS &4 3/4 DC JTS 4"DP SHOT OFF P/U JARS SCREW IN SUB TIH SCREW INTO FISH JAR @15506' NOT ABLE TO CIRC PUMP DOWN BACK SIDE NO SUCCESS

BAR AS NEEDED FOR 15 1 WT GEL AS NEEDED FOR 45 VIS CAUSTIC 1SX/TOUR 5HRS/SX WATER 5 GAL/MIN MIL PACR 1 SX /TOUR, @ 5HRS DT#152519 \$ 855 32

12/2/99 JAR ON FISH @15506' R/UBAKER &FREEPOINT PUMPED 60BBLS GOT RETURNS R/D FREEPOINT CIRC AND JAR LOST 380 BBLS OVER SHAKERS WHILE CIRCULATING SAND SHALE BLACK MAGIC R/U FREEPOINT RUN SHOT TO BTM PUMPED TOOL OFF WAIT ON TOOLS RUN IN BACKED OFF

BAR AS NEEDED FOR 15 1 WT GEL AS NEEDED FOR 45 VIS CAUSTIC 1SX/TOUR 5HRS/SX WATER 5 GAL/MIN MIL PACR 1 SX /TOUR, @ 5HRS DT#1152579 \$630 00 DT#1522580 \$630 00 DT#152581 \$630 00 DT#152530 \$758 62 DT#84525 \$377 30 DT#84524 \$373 80

12/3/99 R/D BAKER FREEPOINT TOOH L/D1 JT 5"DP L/D 2JTS 4"DP L/D JARS& FISHING TOOLS & 2 JTS 4"DP SHOT OFF PU BHA TIH ORIENT TOOLS& TROUGHING TIME

BAR AS NEEDED FOR 15 2-15 5WT CAUSTIC SX/TOUR 5HRS/SX XANPLEX 5SX/TOUR@1HR/SX

DRILL 15560-15567' 1'/HR
RAISING MUD WEIGHT TO 15 5PPG MIXING XANPLEX
RAISING VIS TO 48-52

WATER 5 GAL/MIN MIL PACR 1 SX /TOUR, @ 5HRS DT#152627 \$630 00 DT#152626 \$630 00

12/4/99 TIME DRILL 15567-15578' CIRC MIX PILL TOOH, PUMP 2ND PILL TOOH P/U NEW MOTOR, ORIENT & TEST TIH CUT DRILL LINE 107' TIH FILL DP

BAR AS NEEDED FOR 15 2-15 5WT CAUSTIC SX/TOUR 5HRS/SX XANPLEX 2 SX/TOUR@1HR/SX WATER 5 GAL/MIN MIL PACR 1 SX /TOUR, @ 5HRS

12/5/99 TIH ORIENT & REAM TO BTM 15564-15578' SLIDE F/15578-15640'
CIRC BTMS UP PUMP PILL TOOH DUMPED AND CLEANED THE SAND TRAP AND THE SHALE TANK,136 BBLS

BAR AS NEEDED FOR 15 2-15 5WT CAUSTIC 1 SX/TOUR 5HRS/SX XANPLEX 2 SX/TOUR@1HR/SX WATER 5 GAL/MIN MIL PACR 1 SX /TOUR, @ 5HRS XC-102 2 CANS/TOUR@2 5 HRS/CAN

12/6/99 MIX PILL TOOH P/U MOTOR TIH ORIENT REAM TO BTM SLIDE 15640-15673' DT#84536 \$376 6 DT# 139511 630 00 DT#139512 \$630 00 DT#152668 \$630 00 DT#152667 \$630 00

BAR AS NEEDED FOR 15 2-15 5WT CAUSTIC 1 SX/TOUR 5HRS/SX XANPLEX 2 SX/TOUR@1HR/SX WATER 5 GAL/MIN MIL PACR 1 SX /TOUR, @ 5HRS XC-102 2 CANS/TOUR@2 5 HRS/CAN LIGCO 5SX /TOUR @1HR/SX

12/7/99 SLIDE 15673-15698' CHECK F/FLOW & PRESSURE DROP OK CIRC BTMS UP TOOH P/U MOTOR TIH WASH THROUGH SIDE TRACK TO BTM

BAR AS NEEDED FOR 15 4-15 5WT CAUSTIC 1 SX/TOUR 5HRS/SX XANPLEX 2 SX/TOUR@1HR/SX WATER 5 GAL/MIN MIL PACR 1 SX /TOUR, @ 5HRS XC-102 2 CANS/TOUR@2 5 HRS/CAN LIGCO 5SX /TOUR @1HR/SX

12/9/99 MWD FAILURE TOOH CHG BHA TIH BOL # 139511, 139512

BAR AS NEEDED FOR 15 4-15 5WT CAUSTIC 1 SX/TOUR 5HRS/SX XANPLEX 2 SX/TOUR@1HR/SX WATER 5 GAL/MIN MIL PACR 1 SX /TOUR, @ 5HRS XC-102 2 CANS/TOUR@2 5 HRS/CAN LIGCO 5SX /TOUR @1HR/SX

12/9/99 ROTORY DRILL FROM 15729' - 15935' PUMPED 70 BBL SWEEP 150 + VIS DIDN'T COME BACK BAR AS NEEDED FOR 15 4-15 5WT CAUSTIC 1 SX/TOUR 5HRS/SX XANPLEX 2 SX/TOUR@1HR/SX

WATER 3 -4 GAL/MIN XC-102 2 CANS/TOUR@2 5 HRS/CAN LIGCO 5SX /TOUR @1HR/SX

12/10/99 LOST 300 BBL'S MUD PUMPED LCM SWEEPS OF CALCIUM CARBONATE AND FINE MICA DIFFERENTIAL STICKING WHILE SLIDING SPOTTED 70 BBL 15 #/BBL LCM ON BTM PULLED UP INTO CSG BUILT 100 BBL'S 15 2 MUD TOOH BUILT 200BBL 15 2 MUD

BAR AS NEEDED FOR 15 2 WT CAUSTIC 1 SX/TOUR 5HRS/SX XANPLEX 2 SX/TOUR@1HR/SX WATER 3 -4 GAL/MIN XC-102 2 CANS/TOUR@2 5 HRS/CAN LIGCO 5SX /TOUR @1HR/SX

12/12/99 CHG BHA TIH ROTORY DRILL TO 16060'
SHUT OFF PUMP TO ORIENT GOT DIFFERENTIALLY
STUCK SPOTTED 70 BBL 8 7 MUD & 40 BBLS 8 5
BLACK MAGIC WORKED PIPE2 HRS CAME FREE
TOOH TO INSPECT BHA REDUCING MUD WT TO 14 5
D T # 84549, 84550

BAR AS NEEDED FOR 14 5 WT CAUSTIC 1 SX/TOUR 5HRS/SX XANPLEX 3 SX/TOUR@1HR/SX WATER 3 -4 GAL/MIN XC-102 2 CANS/TOUR@2 5 HRS/CAN LIGCO 5SX /TOUR @1HR/SX MIL PAC R 2SX/TOUR @ 2 5 HRS/SX

12/12/99 TIH REDUCED MUD WT TO 14 5 LOWERED FLUID LOSS
TO

<a href="mailto:sec-size-state-

BAR AS NEEDED FOR 14 2 WT CAUSTIC 2 SX/TOUR 2 5HRS/SX XANPLEX 1 SX/TOUR@5HR/SX WATER 3 -4 GAL/MIN XC-102 2 CANS/TOUR@2 5 HRS/CAN LIGCO 5SX /TOUR @1HR/SX MIL PAC R 2SX/TOUR @ 2 5 HRS/SX CALCIUM CARBONATE 12 SX/TOUR 1SX/HR FINE MICA 12SX/TOUR 1SX/HR

12/14/99 DRILLED TO 16158' TOOH F/BHA TIH SLIDE 16158 - 16168' ROTORY TO 16212'

BAR AS NEEDED FOR 14 2 WT
CAUSTIC 2 SX/TOUR 2 5HRS/SX
XANPLEX 1 SX/TOUR@5HR/SX
WATER 4-5 GAL/MIN
XC-102 2 CANS/TOUR@2 5 HRS/CAN
LIGCO 2 SX /TOUR @2 5 HR/SX
CALCIUM CARBONATE 12 SX/TOUR
1SX/HR
FINE MICA 12SX/TOUR 1SX/HR

12/15/99 DRILL TO 16253 TOOH F/BHA DRILL TO 16278' 5-10K ON TOOH

BAR AS NEEDED FOR 14 4 WT CAUSTIC 2 SX/TOUR 2 5HRS/SX XANPLEX 1 SX/TOUR@5HR/SX

WATER 4 GAL/MIN XC-102 2 CANS/TOUR@2 5 HRS/CAN LIGCO 2 SX /TOUR @2 5 HR/SX CALCIUM CARBONATE 24 SX/TOUR 1SX/HR FINE MICA 24 SX/TOUR 1SX/HR

12/15/99 DRILL 16278' TO 16483'

BAR AS NEEDED FOR 14 4 WT CAUSTIC 2 SX/TOUR 2 5HRS/SX XANPLEX 2 SX/TOUR@5HR/SX WATER 4 GAL/MIN XC-102 2 CANS/TOUR@2 5 HRS/CAN LIGCO 2 SX /TOUR @2 5 HR/SX CALCIUM CARBONATE 24 SX/TOUR 1SX/HR FINE MICA 24 SX/TOUR 1SX/HR

12/16/99 DRILL ROTATE 16430-16509' CIRC PUMP PILL TOOH CHANGE OUT BIT TIH MAT MIXED CAUSTIC 2SX/BAR 8 TON/XANPLEX 2SX/MICA 18SX/MIL CARB 18SX/XC-102 2SX/RENTAL 1/ENGINEERING 1/TAX \$87 96 BAR AS NEEDED FOR 14 4 WT
CAUSTIC 2 SX/TOUR 2 5HRS/SX
XANPLEX 2 SX/TOUR@5HR/SX
WATER 4 GAL/MIN
XC-102 2 CANS/TOUR@2 5 HRS/CAN
LIGCO 2 SX /TOUR @2 5 HR/SX
CALCIUM CARBONATE 24 SX/TOUR
1SX/HR
FINE MICA 24 SX/TOUR 1SX/HR
RUN MUD CLEANER 10 HRS AND RUN
CENTRIFUGE 4 HRS

12/17/99 WASH & REAM 212' TO BOTTOM DRILL F/16509-16573', SURVEY DRILL F/16573-6635' MAT USED GEL 5SX/PAC R 1SX/XAN PLEX D 4 SX/CAUSTIC 4 SX/XC-102 4 CANS/CACO3 48SX/MICA FINE 48 SX/LICO 4 SX

BAR AS NEEDED FOR 14 4 WT
CAUSTIC 2 SX/TOUR 2 5HRS/SX
XANPLEX 2 SX/TOUR@5HR/SX
WATER 4 GAL/MIN
XC-102 2 CANS/TOUR@2 5 HRS/CAN
LIGCO 2 SX /TOUR @2 5 HR/SX
CALCIUM CARBONATE 24 SX/TOUR
1SX/HR
FINE MICA 24 SX/TOUR 1SX/HR
RUN MUD CLEANER 10 HRS AND RUN
CENTRIFUGE 4 HRS

12/18/99 DRILL 16513-16733', PUMP PILL TOOH

MAT USED LIGCO 10SX /MILCARB 21SX /MIL PAC LV 2SX /MICA FINE 28SX /XANPLEX 2SX /XC-102 4CANS

BAR AS NEEDED FOR 14 4 WT
CAUSTIC 1 SX/TOUR 2 5HRS/SX
XANPLEX 2 SX/TOUR@5HR/SX
WATER 4 GAL/MIN
XC-102 2 CANS/TOUR@2 5 HRS/CAN
LIGCO 2 SX /TOUR @2 5 HR/SX
CALCIUM CARBONATE 24 SX/TOUR
1SX/HR
FINE MICA 24 SX/TOUR 1SX/HR
RUN MUD CLEANER WHILE DRILLING

12/19/99 TOOH P/U BIT TIH WORK THROUGH SIDE TRACK WASH & REAM 60' TO BTM DRILL 16733-16765 WITH ANDER GAUGE CLOSED DRILL 16765-16786' WITH ANDER GAUGE OPEN MAT USED XAN PLEX 2 SX/LIGCO 2SX/ MIL CARB 24SX/MIC FINE 24SX/DT#8460 /DT#50049 S0 \$262 50

BAR AS NEEDED FOR 14 4 WT
CAUSTIC 1 SX/TOUR 2 5HRS/SX
XANPLEX 2 SX/TOUR@5HR/SX
WATER 4 GAL/MIN
XC-102 2 CANS/TOUR@2 5 HRS/CAN
LIGCO 2 SX /TOUR @2 5 HR/SX
CALCIUM CARBONATE 24 SX/TOUR
1SX/HR
FINE MICA 24 SX/TOUR 1SX/HR
RUN MUD CLEANER WHILE DRILLING

12/20/99 DRILL ROTATE 16832-16838', ANDER GAGE CLOSED CHANGE OUT MWD ON STD PIPE DRILL ROTATE 16838-16859' ANDER GAGE CLOSED CONN & SURVEY @16859' REAMED 3 TIMES DRILL 16859-16865 ANDER GAGE CLOSED CIRC BTMS UP TOOH

BAR AS NEEDED FOR 14 4 WT
CAUSTIC 1 SX/TOUR 2 5HRS/SX
XANPLEX 2 SX/TOUR@5HR/SX
WATER 4 GAL/MIN
XC-102 2 CANS/TOUR@2 5 HRS/CAN
LIGCO 2 SX /TOUR @2 5 HR/SX
CALCIUM CARBONATE 24 SX/TOUR
1SX/HR
FINE MICA 24 SX/TOUR 1SX/HR
RUN MUD CLEANER WHILE DRILLING

12/21/99 CIRCULATE PUMP PILL TOOH CHANGE BHA TIH, TOOH BAR AS NEEDED FOR 14 4 WT 32 STDS F/SCREEN CUT DRILING LINE RIG SERVICE CAUSTIC 1 SX/TOUR 2 5HRS/S TIH REAM F/16766-16865' CIRC & MIX PILL TOOH XANPLEX 2 SX/TOUR@5HR/SX

BAR AS NEEDED FOR 14 4 WT
CAUSTIC 1 SX/TOUR 2 5HRS/SX
XANPLEX 2 SX/TOUR@5HR/SX
WATER 4 GAL/MIN
XC-102 2 CANS/TOUR@2 5 HRS/CAN
LIGCO 2 SX /TOUR @2 5 HR/SX
CALCIUM CARBONATE 12SX/TOUR
1SX/HR
FINE MICA 12SX/TOUR 1SX/HR
RUN MUD CLEANER WHILE DRILLING

12/22/99 CIRC PULL 4 STDS SOME TIGHTHOLE, PUMP SLUG TOOH CHANGE BHA, BIT, MOTOR, CHECK MWD TEST, P/U NEW ANDER GAGE CHANGE GRABBER DIES TIH REAM 16766-16867' ROTATE 16867-16876' CIRC BTMS PULL 4STDS PUMP PILL TOOH MIXED HIGH VIS SWEEP WHEN ON BTM BAR AS NEEDED FOR 14 4 WT
CAUSTIC 1 SX/TOUR 2 5HRS/SX
XANPLEX 2 SX/TOUR@5HR/SX
WATER 4 GAL/MIN
XC-102 2 CANS/TOUR@2 5 HRS/CAN
LIGCO 2 SX /TOUR @2 5 HR/SX
CALCIUM CARBONATE 12SX/TOUR
1SX/HR
FINE MICA 12SX/TOUR 1SX/HR
RUN MUD CLEANER WHILE DRILLING

12/23/99 TIH W/LOGGING TOOLS COMPRESSION SENSOR DAMAGED TOOH TO CHG TIH W/NEW TOOLS

BAR AS NEEDED FOR 14 4 WT WHILE CIRCULATING 3-4 GAL/MIN WATER CAUSTIC 2 SX/2 5 HRS XC102 2 CANS/2 5 HRS

12/24/99 LOGGED HOLE W/ NO PROBLEMS TOOH NEW LOG TOOLS TIH BAR AS NEEDED FOR 14 4 WT WHILE CIRCULATING 3-4 GAL/MIN WATER 12/26/99 LOG HOLE TO 16281' TOOLS STOPED TOOH LDLT AS PER ENGR ON LOC TIH W/BIT KELLY UP AT 16400' TO REAM LOST RETURNS 12/27/99 SPTTED 25#/BBL LCM SWEEP IN OPEN HOLE PULLED AS PER ENGR ON LOC BACK TO SHOE BUILT VOL GOT RETURNS BACK REAMED TO BTM SWEEP HOLE 2 TIMES WHILE REAMING 150+ VIS CIRC BTMS UP, SHORT TRIP D T#'S 84576, 77, 78, 79, 80 AND 80031482 AS PER ENGR ON LOC 12/28/99 THINNED MUD TOOH F 3 5" LINER AS PER ENGR ON LOC 12/28/99 RAN 3 5" LINER TOOH F/PACKER TEST 7 625 LINER TOP TO 2250# RUN 9 625 PACKER TO INSPECT CSG F/WEAR AS PER ENGR ON LOC 12/29/99 SET 9 625 STORM PKR NIPPLE DOWN BOP VISUAL INSPECT 9 625 CSG NO PROBLEMS NIPPLE UP, PRESSURE TEST BOP FAIL NIPPLE DWN CSG SEAL BROKE AT SLIPS WOO 12/30/99 NIPPLE UP TEST BOP TIE INTO AND RELEASE STORM AS PER ENGR ON LOC PACKER CIRC BTMS UP TOOH 12/31/99 TIH SET PKR AT 10280' CIRC BTMS UP TOOH NIPPLE AS PER ENGR ON LOC DWN RIG UP CSG JACKS 1/1/00 RIG UP CSG JACKS SPEAR CSG BACK OFF 19 JTS AS PER ENGR ON LOC LAY DOWN 864' TIH 930' CIRC W/FRESH WATER RUN NEW CSG 1/2/00 RUN NEW CSG LAND IN CSG SLIPS TEST TO 1500# AS PER ENGR ON LOC NIPPLE UP BOP

AS PER ENGR ON LOC

1/3/00 TEST BOP TIH 10200 TO PACKER CIRC BTMS UP

RELEASE PACKER

1/4/00 POOH TO 7000' TEST CASING TO 6000 PSI TOW PICK UP CASING BRUSH TIH CIRC 3 HOURS TOW FOR PRODUCTION PACKER

AS PER ENGR ON LOC

1/5/00 PICK UP PACKER AND TRIP IN, DROP BALL ND ATTEMPT TO SET PACKER, PACKER WILL NOT SET

AS PER ENGR ON LOC

1/6/00 RIG REPAIR, BREAKS SET PACKER AND TEST TO 2000 AS PER ENGR ON LOC PSI CIRCULATE, MIX SLUG AND TRIP OUT LAY DOWN PACKER SETTING TOOL, PICK UP CASING SCR APER AND BIT A ND TRIP IN HOLE CIRCULATE AND CONDITION